Kenya 2009 Population and Housing Census

Analytical Report on Kenya Population Atlas

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Foreword

The 2009 Kenya Population and Housing Census (KPHC) was conducted as from the night of 24th/25th to 31st August 2009. The census was the fifth to be undertaken in Kenya since independence and the seventh in Kenya's history, the others having been conducted in 1948, 1962, 1969, 1979, 1989 and 1999. Planning and execution of census was spearheaded by the Kenya National Bureau of Statistics (KNBS) on behalf of the Kenya Government – in accordance with the Statistics Act 2006. The theme of the census was "counting our people for implementation of vision 2030", which was deemed necessary in order to respond to the greater demand for statistical information for monitoring the implementation of the Kenya's development plans and other global initiatives such as the Millennium Development Goals (MDGs).

The main objective of the census was to provide the government and other stakeholders with essential information on population, in terms of demographic, social and economic characteristics and, housing conditions and household amenities. By generating information at all administrative levels, it was also intended to provide a sound basis to evaluate the impact of population related policies and programmes in the country.

The first series of the census preliminary results were released in a set of four volumes in August, 2010. The results presented information on population distribution by administrative units; population distribution by political units; population distribution by age and sex; and distribution of households by socio-economic characteristics. This second set comprising of 13 analytical reports addresses topics of Fertility and Nuptiality, Mortality and Health, Housing Conditions, Amenities and Household Assets, Education and Training, Household and Family Dynamics, Disability, Migration, Urbanization, Labour Force Dynamics, Gender Dimensions, Population Dynamics, Population Projections and Kenya Census Atlas.

Preparation of the analytical reports involved collaborative efforts of both local and external experts, various government ministries and departments. The authors were recruited on competitive basis, ensuring that such persons had the necessary experience and skills and most of them had played similar roles in previous Kenyan censuses. The authorship was done under the supervision of two experienced lead consultants.

The data capture was done using scanning technology. The processes were highly integrated, with tight controls to guarantee accuracy of results. To achieve internal consistency and minimize errors, rigorous data editing, cleaning and validation were carried out to facilitate further analysis of the results. The information presented in these reports is therefore based on more cleaned data sets, and is therefore preferred in case there are differences in the results published in the first set of volumes.

The Kenya Census Atlas presents graphic presentations of the spatial distribution of various population and housing indicators at the National, County, District and sub-location levels. The maps presented are accompanied by brief notes on the indicator being depicted. They are informative and play vital role in the quest to implementation of Vision 2030 and realization of the Millennium Development Goals (MDGs). The atlas will be of great assistance to researchers, policy makers and institutions.

On behalf of the Government, I wish to thank the management and staff of Kenya National Bureau of Statistics, KNBS Board of Directors, other public officials and authors for their contributions towards writing of this monograph and US Census Bureau for the technical support. I would also like to thank our development partners, especially UNFPA, for the financial support in writing and publication of this monograph.

Hon. Wycliffe Ambetsa Oparanya, EGH, M.P.
Minister of State for Planning, National Development and Vision 2030

Acknowledgement

The 2009 Kenya Population and Housing Census (KPHC), whose theme was *"counting our people for implementation of vision 2030"* was the fifth to be conducted in Kenyan since independence and the seventh in Kenya's history. The census was carried out on a *de facto* basis with the 24th/25th being the reference night. The first series of the census preliminary results were released in a set of four volumes in August, 2010. This was achieved in a record time of one year after successful enumeration. This monograph is one among a set of thirteen that are a culmination of an ambitious, synchronized and all-inclusive in-depth analysis process addressing various topical areas regarding the demographic, social and economic profiles of the Kenyan population.

The 2009 census was accomplished through concerted efforts of various organizations, institutions, government ministries and individuals who assisted in a variety of ways to prepare, collect, compile, process, analyse and publish the results. Kenya National Bureau of Statistics (KNBS), on behalf of the Government takes this opportunity to thank all those who participated in the preparation of this monograph.

Special appreciation goes to Dr. Edward Sambili, the Permanent Secretary in the Ministry of State for Planning, National Development and Vision 2030; the KNBS Board of Directors led by the Chairman, Mr. Edwin Shisia Osundwa, EBS; Dr. Collins Opiyo, who initiated the process; the Acting Director for Population and Social Statistics, Mr. Macdonald Obudho and Michael Musyoka, who coordinated the process; Robert Buluma; Andrew Imbwaga; Godfrey Otieno and all KNBS Directors and the entire staff for their spirited efforts towards successful compilation of the monographs.

Sincere gratitude also goes to the lead authors of the monographs: Dr. Alfred O. Agwanda and Mr. John Mukui, and the other consultants for their technical input in the whole process. I also extend my unreserved appreciation to the National Coordinating Agency for Population and Development (NCAPD) and the Population Studies and Research Institute (PSRI) of the University of Nairobi for the crucial role played by both management and staff at various stages of the process. Special thanks to Cartography/GIS staff lead by Mrs. Emma A. Odhiambo, Mr. Shem O. Onsare, Mr. George **M.**Kamula and Mrs. Hellen M.Wanyoike for their spirited efforts and contributions in ensuring production of the atlas. The maps would not be useful without the explanatory texts accompanying them. Tremendous efforts were put into these texts and we are very grateful to the various authors and contributors.

We also thank our Development Partners, namely UNFPA, USAID, UNICEF, DfID, UNDP, SIDA, and the US Census Bureau for their material, financial and technical support offered during various phases of implementation, and additional gratitude to UNFPA for coordinating donor support to the census process.

Finally, we sincerely hope that the data contained in this monograph will be fully utilized in the national development planning process by all stakeholders for the welfare of the people of Kenya.

Mr. A.K.M Kilele, MBS
DIRECTOR GENERAL
KENYA NATIONAL BUREAU OF STATISTICS

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Introduction

This Atlas provides information on the population of Kenya, depicting the different demographic and socio-economic characteristics reflecting various aspects of life. The Atlas is arranged in thirteen topical sections. Each section except section A illustrates a wide range of data obtained during the 2009 Kenya Population and Housing Census (KPHC). Various mapping techniques have been used in this Atlas to symbolize the maps. Techniques used to illustrate the various indicators were choropleth, dots and graduated symbols. The boundaries and units used in this Atlas are as they were in 2009 when there were 158 districts and 7,149 sub locations. The Atlas is in conformity with the new Constitution which created Counties as administrative/political units and endeavored to display indicators at the County level.

Section 'A' Presents a selection of maps used as references and are not directly related to the 2009 Kenya Population and Housing Census. They depict the location of Kenya in the continent, Kenya from Space, Relief and Transportation network, Land cover, Administrative units (districts and counties), political units (constituencies) and changes in Administrative units over time. The maps in this section will provide important background information about Kenya and stimulate the reader to compare the spatial patterns of socio–economic disparities within the County.

Section 'B' deals with the general demographic characteristics such as population distribution by density, age groups, sex and sex ratio of the population presented by sub location and county.

Section 'C' covers fertility and nuptiality indicators by counties. The indicators are Crude Birth Rate (CBR), Total Fertility Rate (TFR), Singulate Mean Age at Marriage (SMAM), general marital status by sex and Dependency Ratio.

Section 'D' presents indicators of mortality by sex and county. This includes Infant Mortality Ratio (IMR), Under Five Mortality Ratio (U5MR), Life Expectancy and Maternal Mortality Ratio (MMR).

Section 'E', migration indicators presented include: Lifetime Total Net migrants, Lifetime Total In migrants, Lifetime Total Out migrants, Recent Net migrants, Recent Total Out migrants and Recent Total In migrants by sex and County. The section provides general trends in migration a cross the counties.

Section "F' deals with Urbanisation. The indicators include Proportion of Urban and rural Population by county, Urban centers by Category, Population Size and Distribution of population in Informal Settlement in Nairobi County.

Section 'G': covers Household and family Dynamics displayed by Households with three or more children under age five, three or more orphans, at least one member aged 60 and above and household headship by Sex, County, District and Sub location. This section also has maps on Parental and potential Support Ratios.

Section 'H' displays indicators on Housing and Amenities. These include Tenure status, Housing quality, Dominant Roofing, Wall and Floor materials of the main dwelling unit, Household amenities such as Main mode of human waste disposal, main source of water, Main of source cooking and lighting fuel.

Section 'J' covers ownership of household Assets such as: Radio, Television set, mobile phone, computer, bicycle and hand drawn cart.

Section 'K' covers Education and Training indicators of Enrolment, Attainment and Population Never attended school by Age, Level, Sex and County.

Section 'L' provides indicators pertaining to Labour Force: they include Proportion of employed population, Working children (age 5 -17 years), Unemployment rate, Economically Inactive population, Proportion of working population, Participation rate and Dependency ratio by Age, Sex County and District.

Section 'M' presents various disabilities indicators. These include spatial distribution of households with disabled persons, categories of disabilities and proportions of people with disabilities by sub location and County.

Last section 'N' deals with gender dynamic indicators such as: proportion of population with no education, with secondary and above level of education, unemployed and inactive population by sex and county.

Section A: Reference Maps

A.1: Geographical Overview

Kenya lies astride the equator and is located on the eastern part of the African continent as shown in map A.1. It covers an area of approximately 582,000 km²; it is bordered by Somalia and the Indian Ocean to the east, Ethiopia to the north, South Sudan to the northwest, Uganda to the west and Tanzania to the south. The coastline, about 536 kilometres (km) long, faces the Indian Ocean and serves the Republic as an important outlet and means of international maritime contact.[1] The geographical coordinates of the country are Latitude 4° North to 4° South and Longitude 34° East to 41° East.

Kenya has tremendous topographical diversity, including glaciated mountains with snow-capped peaks, Mt Kenya being the highest point (5,199 metres), the Great Rift Valley, with its associated escarpments and volcanic mountains, is a major feature that runs from Lake Turkana in the north to Lake Natron on the southern border with Tanzania. Other features include granitic hills, flat desert landscapes and coral reefs. However, the basic configuration is simple. Coastal plains give way to an inland plateau that rises gradually to the central highlands, which are the result of the relatively recent volcanic activity associated with the formation of the rift valley. To the west the land drops again to the Nyanza plateau that surrounds the Kenyan sector of Lake Victoria; and to the north, to the rugged low country around Lake Turkana.[2]

The drainage system in Kenya is largely determined by the Great Rift Valley and can be divided into five major basins namely: Lake Victoria Basin which covers the whole of the area west of the Rift Valley. The main rivers in this basin are the Nzioa, Yala, Nyando, Sio and Sondu-Miriu. The Rift Valley Basin is an area of internal drainage discharging into **L.**Turkana in the north and **L.**Natron in the South. Within this area are several sub-drainage areas discharging into a number of smaller lakes. Athi River Basin falls in the southern part of the country east of the Rift Valley, draining the southern slopes of the Nyandarua (Aberdare) range to form the Athi River which in its lower reaches is known as Sabaki or Galana and discharges into the Indian Ocean. The Tana River Basin-comprises the northern slopes of the Aberdare range, the southern slopes of Mt. Kenya and the Nyambene range, and discharge into the Indian Ocean. Tana is the largest river in Kenya. Ewaso Ng'iro Basin lies in the northern slopes of the Aberdare ranges and Mt. Kenya. Kenya has five important water towers which form the sources of all the rivers draining in the above basins. These water towers are; Mt. Kenya, Aberdare Ranges, Mau Complex, Mt. Elgon and Cherangany Hills.[3]

Kenya enjoys a tropical climate. The climatic factor of greatest economic and social significance in Kenya is rainfall. The coastal areas are hot and humid, temperate inland and very dry in the northern and north eastern parts of the country. The coastal zone is important because of the harbours and its tourism potential. The Kenyan highlands comprise one of the most successful agricultural production regions in the country. Glaciers are found on Mt Kenya, which is Africa's second highest peak, with unique physiography and supports abundant and varied wildlife of scientific and economic value. Both large and small holder farming is carried out in the highlands. Major cash crops are tea, coffee, pyrethrum, wheat and maize. Livestock farming is also practiced. Lake Victoria Basin is dominated by Kano plains which are suited for farming through irrigation. The northern part of Kenya is low plains and arid and the main land use is pastoralism. Kenya also has several tourist attraction areas along the coast as well as in the interior. One of the branches of the Great Rift Valley also cut across the country from north to south.[3]

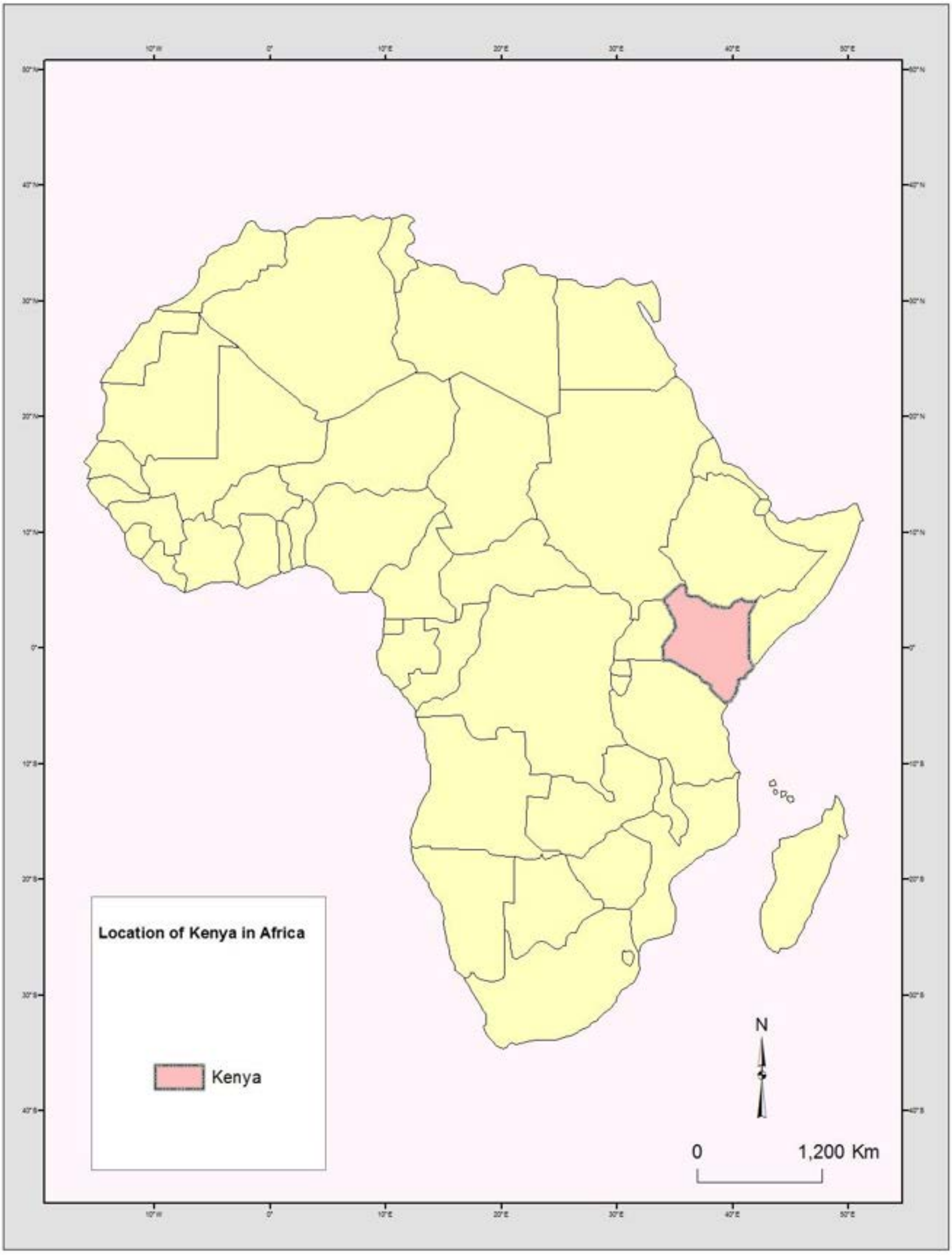
Kenya is one of the most industrially developed countries in East Africa and its manufacturing sector accounts for 14.0 per cent of the Gross Domestic Product. Rapid development in recent years can be attributed to expansions in tourism, telecommunications, transport, construction and a recovery in agriculture. Agriculture (including coffee and tea cultivation) is the main source of revenue for 70.0 per cent of the population. Kenya is also taking advantage of its location as it is considered as a regional hub for trade and finance in East Africa.

[1] http:en.wikipidia.org/wiki/List_of_countries_by_length_of _coastline

[2] Ojany, F.F and Ogendo, R.B (1988) Kenya Physical and Human Geography. Longman Kenya

[3] Raphael W. Kareri: Some Aspect of the Geography of Kenya, Moi University

A.1: Location of Kenya in Africa



Source: *http/www.mapofworld.com/Africa-political-map.htm*

A.2: Kenya from Space

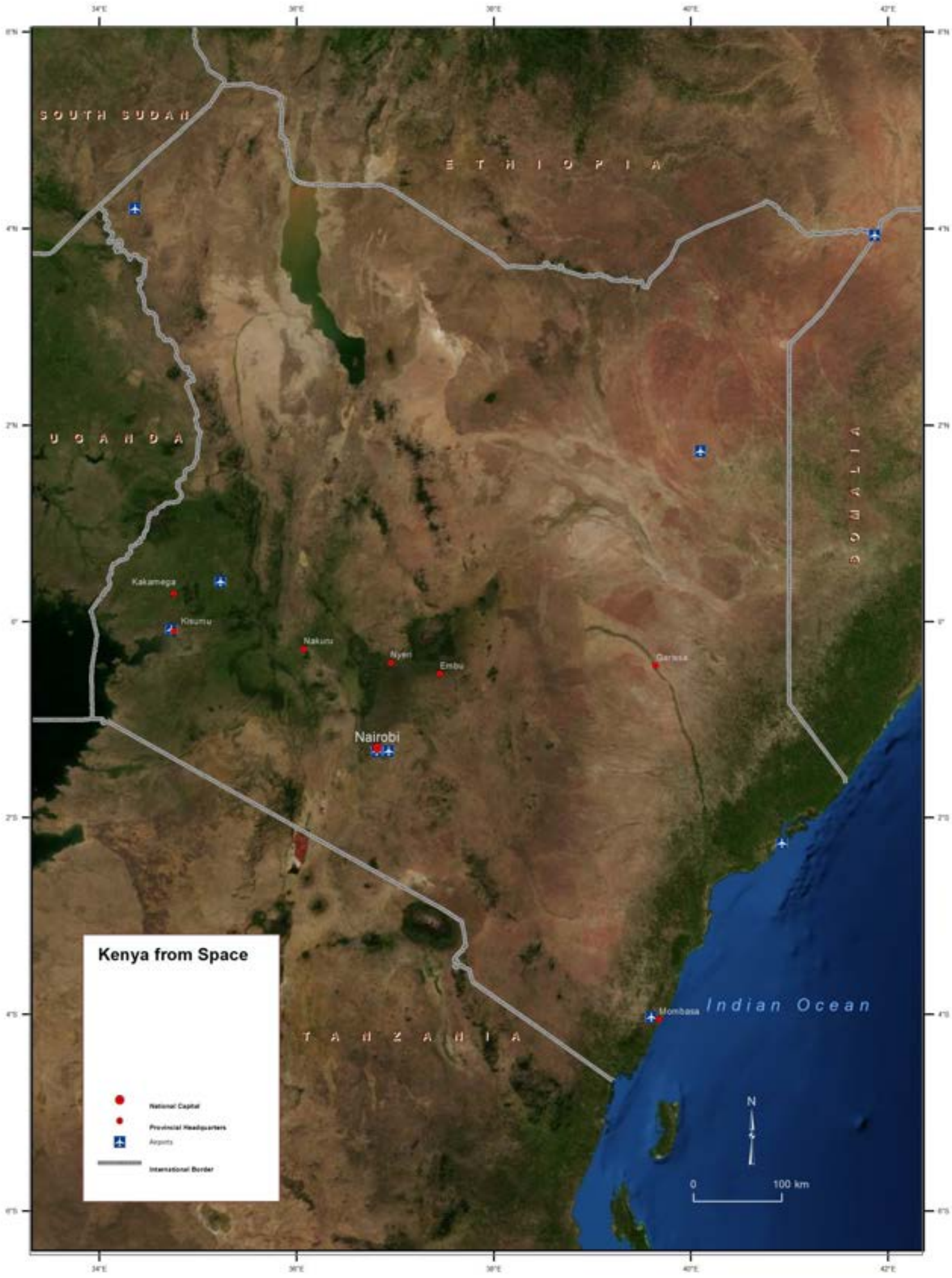
Kenya as viewed from space shows a variety of land cover. Map A.2 displays a natural colour satellite image of Kenya and the surrounding areas. The image shows some basic categories of land cover types.

The darker green colour depicts the ever green forests around Mt Kenya, Aberdare Ranges, (the central parts of the country) Mau Forest, Cherengany Hills, and Nandi Escarpment (in Rift Valley), Kakamega Forest and Mt Elgon forest to the west. The Kakamega and Mau Forests, for example, have suffered continued overuse for timber, charcoal, firewood, cash crops and forest plantation. The light green colour shows the plantation areas (crops and trees). These are areas of high potential and population density.

The riverine vegetation can also be seen along River Tana, Galana and Athi to the East and River Turkwel to the North of the country. Yellowish to brownish colour shows semi arid areas and are mainly covered by shrubs and savannah grassland. Dark blue indicates open waters (Indian Ocean). Along the Rift Valley are several lakes starting from Lake Turkana in the North and ending with Lake Natron to the south of the Kenya –Tanzanian border.

The map also depicts major towns and airports. The towns are shown in red circles and the national capital is shown in a large circle with a black dot inside.

A.2: Kenya from Space



Source: ESRI, Arc Map10 Base map

A.3: Relief and Transportation Network

Map A.3 presents the relief and major road network in Kenya in 2009. Kenya's relief stretches from sea level to 5,199 metres at the peak of Mt. Kenya. This combined with its tropical latitudinal location creates a varied physical environment with characteristics that are almost equatorial, proper contrasting with semi-arid and arid environments. Kenya has a distinctive topographic profile as seen on the relief map. Kenya can be divided into five major natural geographical regions namely; Coastal belt and plains, Highlands and Plateaus; Rift Valley, Lake Victoria Basin and Northern plain lands.

Coastal belt and plains: The coastline is low and dominated by small creeks and inlets and extensive mangrove forests. Coral reefs and banks are commonly found 10 to 15 kilometres from the main coastline. The coastal hinterland consists of a dissected plateau with a number of residual hills including Shimba (443 metres), Jibana (314 metres), Lali (426 metres) and Kulalu (443 metres). This region is depicted by bluish grey colour along the coast on map A.3.

Highlands and Plateaus: The Kenya Highlands are found to the east and west of the Great Rift Valley. They provide an interesting example of a high altitude environment in the tropics with characteristically diversified agriculture showing both tropical and temperate features. The Highlands to the east of the Rift Valley varies between altitudes 1,500 metres-5,199 metres with Mt. Kenya as the highest peak. It also covers the Aberdare Ranges. The highlands to the west of the Rift Valley lie between altitude 1800 metres to 2750 metres and have Mt. Elgon slopes and the Cherangany Hills. Laikipia and Uasin Gishu Plateaus are found in this region. Some areas within the western highlands are swampy, such as Koitoboss swamp and the Saiwa swamp, and a Ramsar site which is a wetland of international importance. The region is rich agriculturally. Greyish colour depicts this region on map A.3.

The Rift Valley: One of the most remarkable features of the earth's crust is the Rift Valley of Africa which cuts Kenya from Lake Turkana to the north to Tanzania Border to the south. It is flanked by scarp lines like the Nyandarua Range (Aberdares) on its eastern side and the Mau Escarpment on its western side; it reaches relative altitude of 1,000 metre or more. The distance between East - West escarpments varies from 48-64 kilometres. The more important cones are, from north to south, Silali (2,355 metres), Menengai (2,279 metres), Longonot(2,776 metres) Suswa (2,3550 metres) and Shimbole (1,564 metres). On the floor of the Rift Valley are several lakes. Fresh water lakes:Turkana, Magadi, Natron, Elementaita, Nakuru, Naivasha, Baringo and Bogoria.

Lake Victoria Basin :has an altitude range from 1,216 metres-1,520 metres and some of the prominent hills in this area are: Maragoli, Gwasi, Gembe, Ruri and Homa. The area is also dominated by the Kano plains which are suited for irrigation.

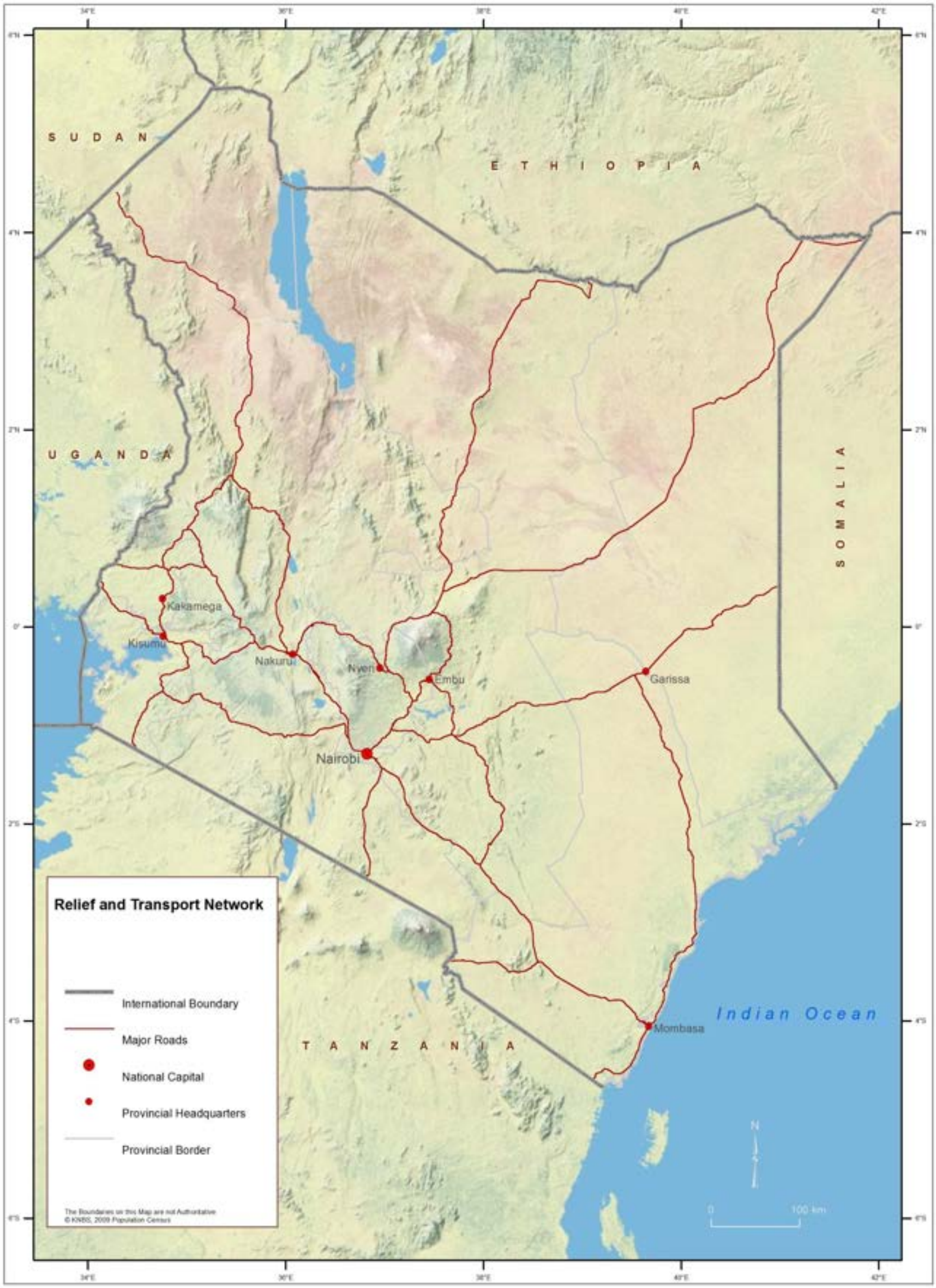
Northern plain lands: The region stretches from the border with Uganda on the west to the Somalia border on the east. It is made up of a series of arid plains formed by erosion or by great outpourings of lava. It covers practically the whole of Northern Kenya. The area is characterized by aridity and low human population. It is dominated by extensive low lying interior plains that range in height between 366 metres and 912 metres. A number of volcanic cones interrupt the monotony of the landscape. These are: Marsabit (1,428 metres), Kulal (2,294 metres) Hurri Hills (1,479 metres) and other smaller ones. Chalbi desert and Lake Turkana are found in this region. Due to overgrazing the whole region is threatened with desertification. Cases of long dry spells that desiccate the land are common. This region is shown by the brownish colour on map A3.[4]

Road Infrastructure is a key driver to development of nations. The Kenya Vision 2030 aspires a country firmly interconnected through a network of roads, railways, ports, airports, water ways and telecommunications as well as adequately provided with energy. Road transport is the predominant mode of transport and carries about 93 percent of all cargo and passenger traffic in the country. Kenya's road network has been established to be 160,886 km long. About 61,936 kilometres of these roads are classified while the remaining 98,950 kilometres are unclassified. However the map shows only two major classes of roads in the country i.e. Class A.international trunk roads covering 3,755 kilometres (6.0 per cent) and Class B National trunk roads covering 2,799 kilometres (4.0 per cent). On the map the major roads are shown in red.[5]

Map A.3 also depicts Provincial headquarters which are shown in red circles and the national capital is shown in a large circle with a black dot.

[4] Raphael W. Kareri: Some Aspect of the Geography of Kenya, Moi University
[5] Ministry of Roads and Public Works: Kenya Roads Board (http://www.krb.go.ke/index.php/road-network-kenya)

A.3: Relief and Transportation Network



Source: *ESRI, Arc Map10 Base map*

A.4: Kenya Land Cover

Kenya has great flora diversity including forest, woodlands and swamps, grassland of many different varieties[6]. Of all the varieties of plants, 25.0 per cent comprise of shrubs and trees of which 5.0 per cent are considered endangered while about 8.0 per cent are rare[7]. Kenya's land cover can be classified in six broad categories namely: urban and associated rural settlements, Agricultural areas, Forests, savanna and woodland, bare areas and natural water bodies. Map A.4 provides the diversity of land coverage in Kenya.

The first category is urban and associated rural settlements: these are shown on the map A.4 with a dark red colour and are scattered all over the country. The main urban settlements include: Nairobi located in the central region, Mombasa on the shores of the Indian Ocean and Kisumu in the west on the shores of Lake Victoria to mention but a few.

Second broad category is the Agricultural area that covers a proximately one third of the country. This area is shown on the map with a range of pink and purple shades. The light pink hue on the map depicts areas covered by rain fed herbaceous crops and scattered natural vegetation. These are mainly distributed in Western, Nyanza, Central, parts of central Rift Valley, Eastern and Coast Provinces. The dark pink hue shows the irrigated herbaceous crops, these are mainly found in Western, Nyanza and Eastern Provinces. The 'hot pink' hue depicts areas covered by rain fed shrub crops and scattered natural vegetation. This type of land cover is found mainly in Central, Nyanza and parts of Rift. Colour purple depicts areas under rainfed tree crops and scattered natural vegetation covering parts of Coast, Eastern, Central, Rift Valley, Nyanza and Western Provinces. The last land cover in this category is the rice fields which is shown by light purple colour and is found in Cental Province (Kirinyaga County).

The third category is the forested areas and is depicted by a range of green shades. The dark green (fir green hue) shade shows areas covered by multilayered trees (broad leaved ever green trees) found around Mt. Kenya and southern parts of the Aberdare Ranges in Central Province. Leafy green depicting closed trees which is common in parts of Rift Valley (Mau Forest, Nandi Escarpment), Western Province (around Mt Elgon and Kakamega Forests), Central Province (Aberdare Ranges and parts of Mt. Kenya) and parts of Coast Province. Areas covered open trees are depicted by apple green shade and are found in Lamu, Garissa, Kwale and Kajiado Counties. Open to closed harbecous vegetation which is spread in arid and semi arid lands and is shown with lemon grass shade. Forest plantations are mainly found in parts of Rift Valley and Central Provinces are depicted on the map with olive green shade. Dark navy blue shade represents the mangrove forest and is mainly found along the coastline. Herbaceous vegetation in flooded areas which are found in Busia, Siaya Turkana, Wajir, Garissa, Tana River and Narok counties are shaded bluish green (deep Forest).

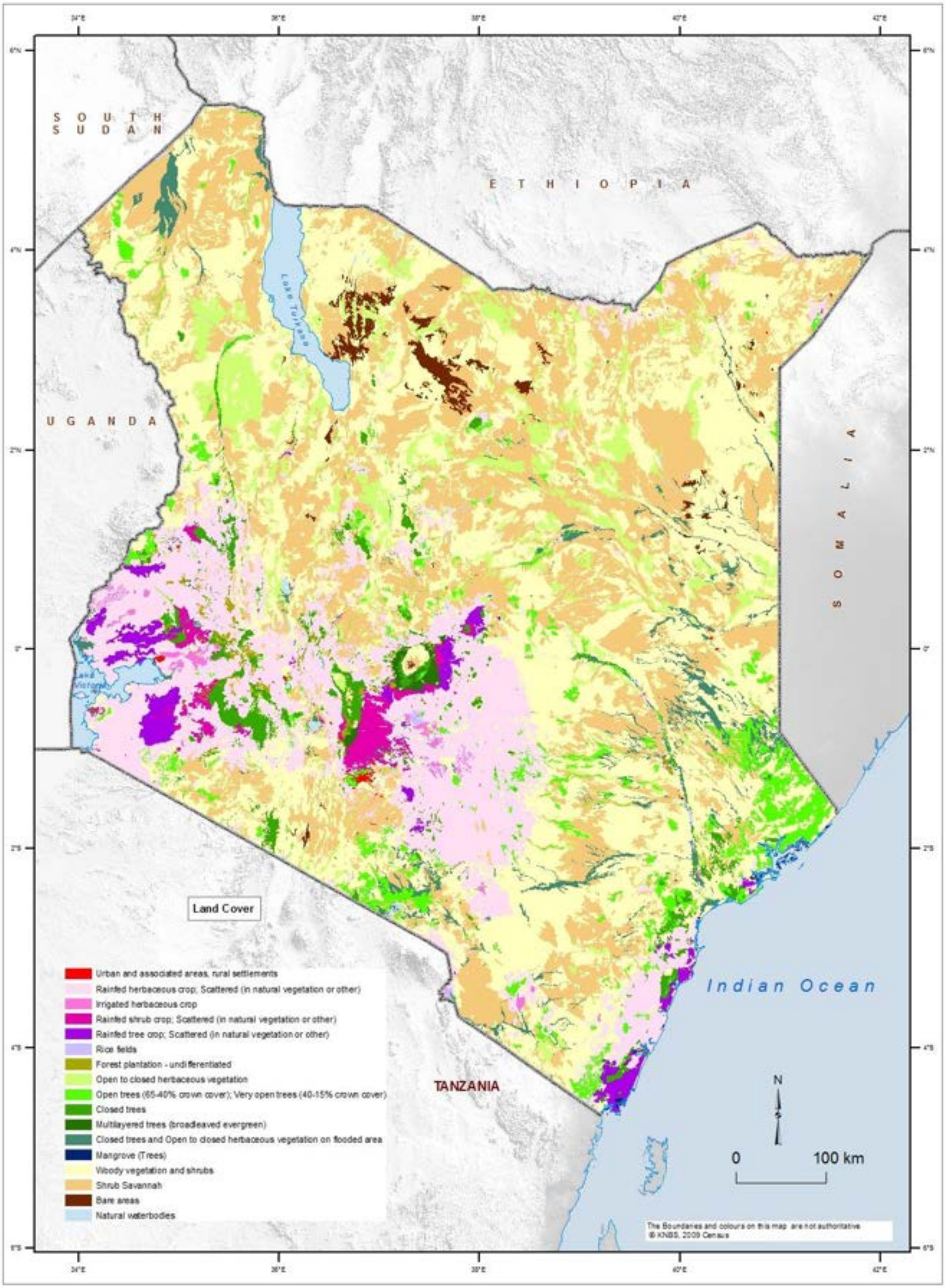
The fourth category is the area covered by light yellow and beige shades representing woody vegetation, shrubs and savanna. Thorn bushland and woodland are the most extensive vegetation types in Kenya (41.7 per cent), running from Amboseli in the south through the Tsavo parks to north-east and north-west Kenya. Characteristic tree species are Acacia[8]

The fifth categories is bare areas and is symbolized by dark brown hue and are found in Marsabit County (Chalbi desert) and pockets in Wajir and Kajiado counties.

The sixth category is natural water bodies shown with light blue colour. Some of the water bodies are: Lake Turkana to the North, Indian Ocean to the south east, Lake Victoria to the West and in the Central parts of the country are several small lakes (Naivasha, Elementaita, Nakuru, Magadi, Bogoria, Baringo)which lie on the floor of the Great Rift Valley. Some of the lakes are tourist attraction sites that generate income to the tourism sector of the economy. Sodium bi-carbonate is mined at Lake Magadi while fishing is carried out on Lakes Naivasha, Victoria, Turkana and Coastal region (Indian Ocean).

[6] World Conservation Monitoring Centre, Kenya: Conservation of Biological Diversity and Forest Eco systems. Michael O. Odhiambo, Liberalization, Law and the Management of Common Property Resources in Kenya. The case of Public Lands and Forests (1996)
[7] Kihika Kiambi and Monica Opole " Promoting Traditional Foods and Plants in Kenya" In David Cooper et al (eds),Growing Diversity: Genetic Resources and Local Food Security (1992)
[8] www.cheap-kenya-vacation.tips.com/kenya-fauna.html

A.4: Kenya Land Cover



Source: *2003 FAO- Africover*

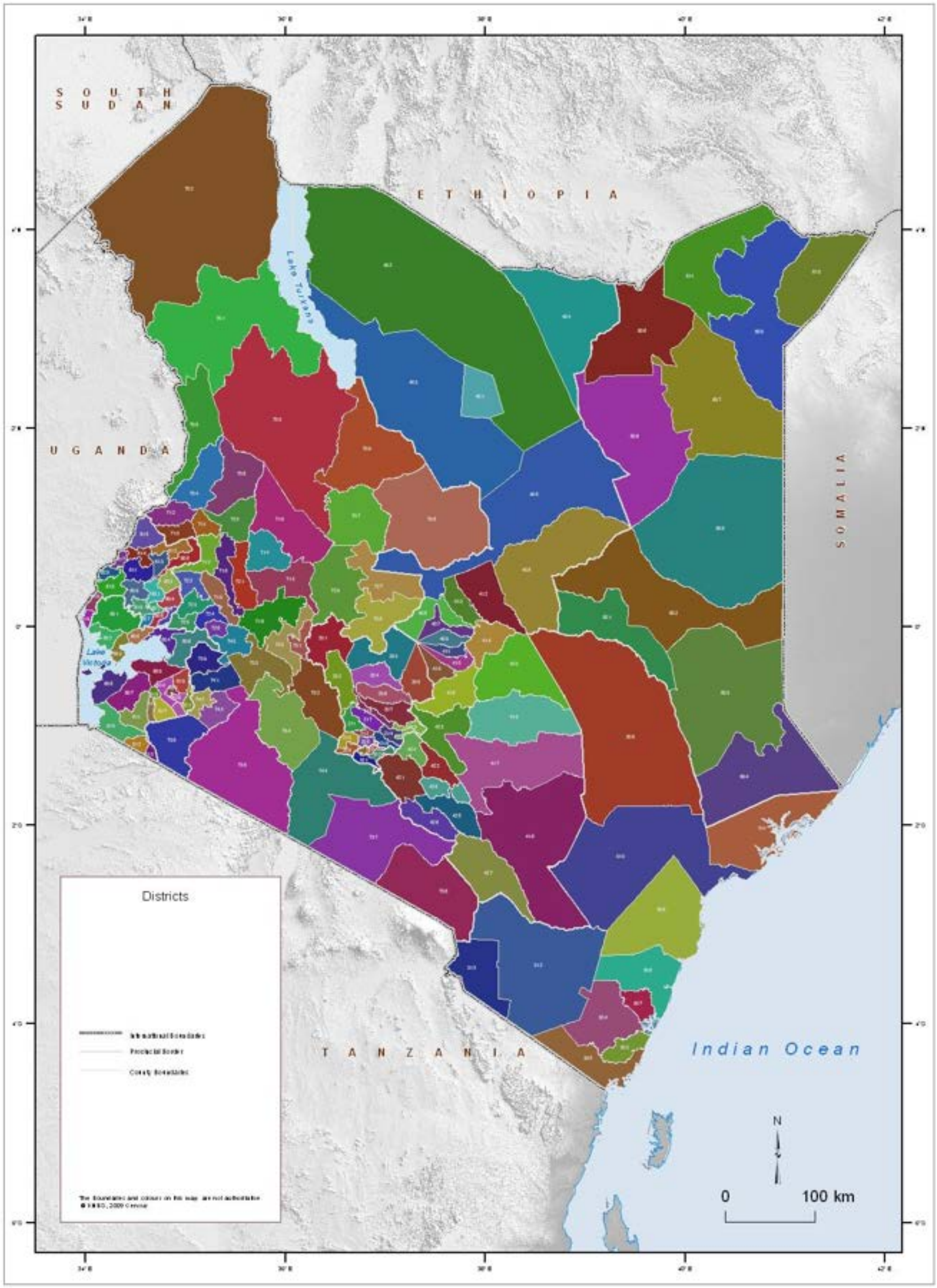
A.5: Administrative Units

The geographic frame for the census is a thorough and exhaustive inventory of all the administrative units in the country. In planning for the population census geographical work, an important decision to make is about the areas for which data is to be collected and reported. During the 2009 and other previous censuses Kenya was divided into five hierarchical administrative levels namely: Province, District, Division, Location and Sub location. At national level, the maps indicate the location of provincial and district boundaries. Map A.5 displays the boundaries for the districts as per the 2009 KPHC, while Table A1 shows the respective names and codes. In 2009, Kenya was divided into eight provinces, and each of these provinces was further sub divided into districts totaling to one hundred and fifty eight (158).

Table A.1: Districts Names and Codes

District Code	District	District Code	District	District Code	District	District Code	District
101	Nairobi West	407	Meru Central	608	Suba	727	Laikipia North
102	Nairobi East	408	Imenti North	609	Rachuonyo	728	Laikipia East
103	Nairobi North	409	Imenti South	610	Migori	729	Laikipia West
104	Westlands	410	Meru South	611	Rongo	730	Nakuru
201	Nyandarua North	411	Maara	612	Kuria West	731	Nakuru North
202	Nyandarua South	412	Igembe	613	Kuria East	732	Naivasha
203	Nyeri North	413	Tigania	614	Kisii Central	733	Molo
204	Nyeri South	414	Tharaka	615	Kisii South	734	Narok North
205	Kirinyaga	415	Embu	616	Masaba	735	Narok South
206	Murang'a North	416	Mbeere	617	Gucha	736	Trans Mara
207	Murang'a South	417	Kitui	618	Gucha South	737	Kajiado Central
208	Kiambu	418	Mutomo	619	Nyamira	738	Loitokitok
209	Kikuyu	419	Mwingi	620	Manga	739	Kericho
210	Limuru	420	Kyuso	621	Borabu	740	Kipkelion
211	Lari	421	Machakos	701	Turkana Central	741	Buret
212	Githunguri	422	Mwala	702	Turkana North	742	Sotik
213	Thika East	423	Yatta	703	Turkana South	743	Bomet
214	Thika West	424	Kangundo	704	West Pokot	744	Kajiado North
215	Ruiru	425	Makueni	705	Pokot North	801	Kakamega Central
216	Gatanga	426	Mbooni	706	Pokot Central	802	Kakamega South
217	Gatundu	427	Kibwezi	707	Samburu Central	803	Kakamega North
301	Mombasa	428	Nzaui	708	Samburu East	804	Kakamega East
302	Kilindini	501	Garissa	709	Samburu North	805	Lugari
303	Kwale	502	Lagdera	710	Trans Nzoia West	806	Vihiga
304	Kinango	503	Fafi	711	Trans Nzoia East	807	Emuhaya
305	Msambweni	504	Ijara	712	Kwanza	808	Hamisi
306	Kilifi	505	Wajir South	713	Baringo	809	Mumias
307	Kaloleni	506	Wajir North	714	Baringo North	810	Butere
308	Malindi	507	Wajir East	715	East Pokot	811	Bungoma South
309	Tana River	508	Wajir West	716	Koibatek	812	Bungoma North
310	Tana Delta	509	Mandera Central	717	Eldoret West	813	Bungoma East
311	Lamu	510	Mandera East	718	Eldoret East	814	Bungoma West
312	Taita	511	Mandera West	719	Wareng	815	Mt Elgon
313	Taveta	601	Siaya	720	Marakwet	816	Busia
401	Marsabit	602	Bondo	721	Keiyo	817	Teso North
402	Chalbi	603	Rarieda	722	Nandi North	818	Samia
403	Laisamis	604	Kisumu East	723	Nandi Central	819	Bunyala
404	Moyale	605	Kisumu West	724	Nandi East	820	Teso South
405	Isiolo	606	Nyando	725	Nandi South		
406	Garbatula	607	Homabay	726	Tinderet		

A.5: 2009 Kenya Administrative Districts



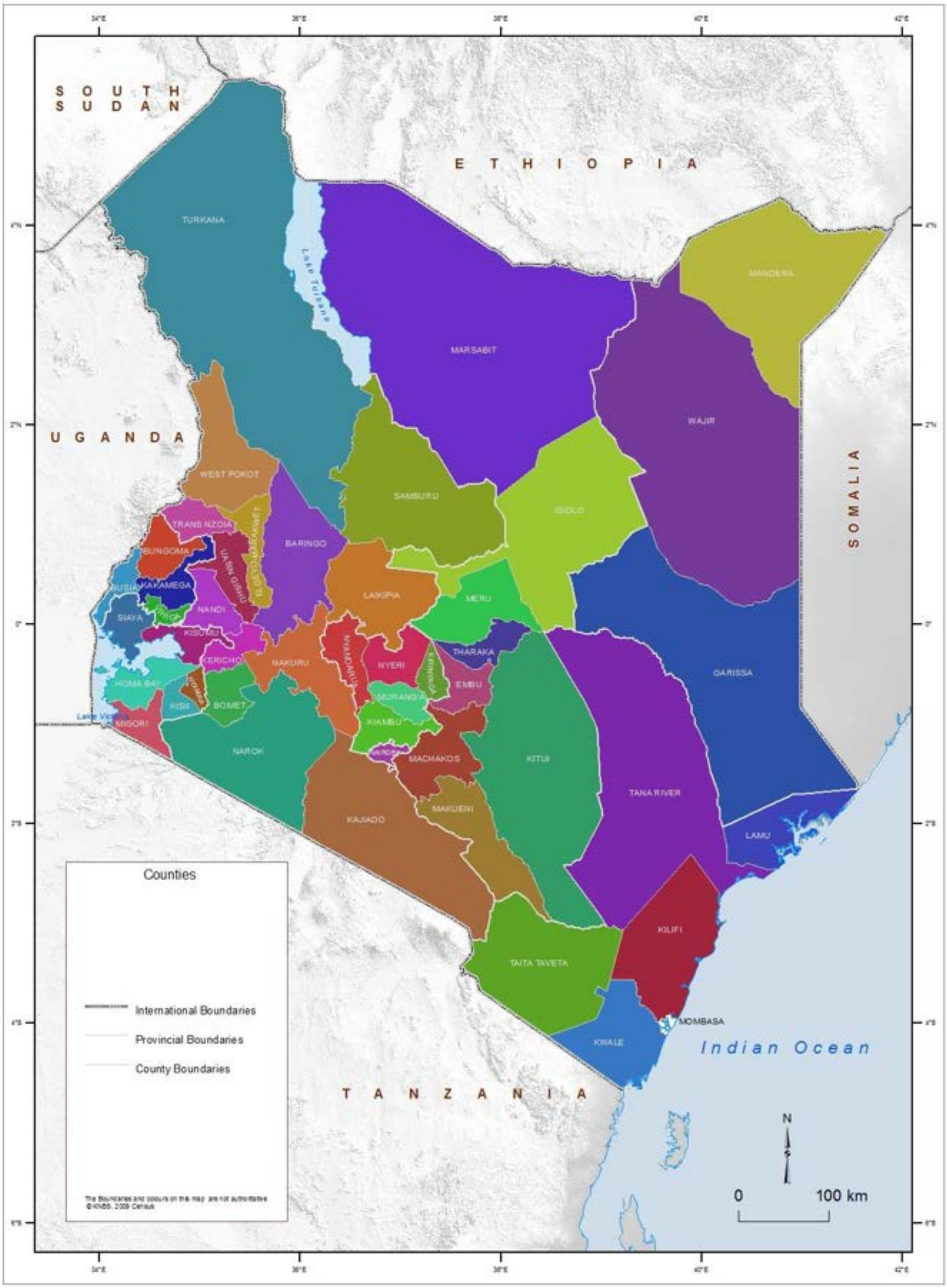
A.6: Counties

Kenya was divided into provinces, districts, divisions, locations and sub-locations before the enactment of the new Constitution on August 27, 2010. In the new constitution counties have become the focal point for development. There are forty seven counties, and each county is made up of several districts as indicated in Table A.2 below. In the Table, there are forty seven (47) Counties and one hundred and fifty eight (158) districts as they were during the 2009 Population and Housing Census. The counties are used to display various indicators in most of the chapters in this census atlas. The number of districts vary from county to county with Kiambu County having the highest (ten districts) and Lamu the lowest (one district). Map A.6 shows the spatial distribution of Counties.

Table A.2: Counties and Districts

County Code	County	Dist Code	District	County Code	County	Dist Code	District	County Code	County	Dist Code	District
101	Nairobi	101	Nairobi West			420	Kyuso	705	Baringo	713	Baringo
		102	Nairobi East	407	Machakos	421	Machakos			714	Baringo North
		103	Nairobi North			422	Mwala			715	East Pokot
		104	Westlands			423	Yatta			716	Koibatek
201	Nyandarua	201	Nyandarua North			424	Kangundo	706	Uasin Gishu	717	Eldoret West
		202	Nyandarua South	408	Makueni	425	Makueni			718	Eldoret East
202	Nyeri	203	Nyeri North			426	Mbooni			719	Wareng
		204	Nyeri South			427	Kibwezi	707	Elgeyo-Marakwet	720	Marakwet
203	Kirinyaga	205	Kirinyaga			428	Nzaui			721	Keiyo
204	Murang'a	206	Murang'a North	501	Garissa	501	Garissa	708	Nandi	722	Nandi North
		207	Murang'a South			502	Lagdera			723	Nandi Central
205	Kiambu	208	Kiambu			503	Fafi			724	Nandi East
		209	Kikuyu			504	Ijara			725	Nandi South
		210	Limuru	502	Wajir	505	Wajir South			726	Tinderet
		211	Lari			506	Wajir North	709	Laikipia	727	Laikipia North
		212	Githunguri			507	Wajir East			728	Laikipia East
		213	Thika East			508	Wajir West			729	Laikipia West
		214	Thika West	503	Mandera	509	Mandera Central	710	Nakuru	730	Nakuru
		215	Ruiru			510	Mandera East			731	Nakuru North
		216	Gatanga			511	Mandera West			732	Naivasha
		217	Gatundu	601	Siaya	601	Siaya			733	Molo
301	Mombasa	301	Mombasa			602	Bondo	711	Narok	734	Narok North
		302	Kilindini			603	Rarieda			735	Narok South
302	Kwale	303	Kwale	602	Kisumu	604	Kisumu East			736	Trans Mara
		304	Kinango			605	Kisumu West	712	Kajiado	737	Kajiado Central
		305	Msambweni			606	Nyando			738	Loitokitok
303	Kilifi	306	Kilifi	603	Migori	610	Migori			744	Kajiado North
		307	Kaloleni			611	Rongo	713	Kericho	739	Kericho
		308	Malindi			612	Kuria West			740	Kipkelion
304	Tana River	309	Tana River			613	Kuria East	714	Bomet	741	Buret
		310	Tana Delta	604	Homa Bay	607	Homabay			742	Sotik
305	Lamu	311	Lamu			608	Suba			743	Bomet
306	Taita Taveta	312	Taita			609	Rachuonyo	801	Kakamega	801	Kakamega Central
		313	Taveta	605	Kisii	614	Kisii Central			802	Kakamega South
401	Marsabit	401	Marsabit			615	Kisii South			803	Kakamega North
		402	Chalbi			616	Masaba			804	Kakamega East
		403	Laisamis			617	Gucha			805	Lugari
		404	Moyale			618	Gucha South			809	Mumias
402	Isiolo	405	Isiolo	606	Nyamira	619	Nyamira	802	Vihiga	806	Vihiga
		406	Garbatula			620	Manga			807	Emuhaya
403	Meru	407	Meru Central			621	Borabu			808	Hamisi
		408	Imenti North	701	Turkana	701	Turkana Central			810	Butere
		409	Imenti South			702	Turkana North	803	Bungoma	811	Bungoma South
		412	Igembe			703	Turkana South			812	Bungoma North
		413	Tigania	702	West Pokot	704	West Pokot			813	Bungoma East
404	Tharaka	410	Meru South			705	Pokot North			814	Bungoma West
		411	Maara			706	Pokot Central			815	Mt Elgon
		414	Tharaka	703	Samburu	707	Samburu Central	804	Busia	816	Busia
405	Embu	415	Embu			708	Samburu East			817	Teso North
		416	Mbeere			709	Samburu North			818	Samia
406	Kitui	417	Kitui	704	Trans Nzoia	710	Trans Nzoia West			819	Bunyala
		418	Mutomo			711	Trans Nzoia East			820	Teso South
		419	Mwingi			712	Kwanza				

A.6: Kenya County Map



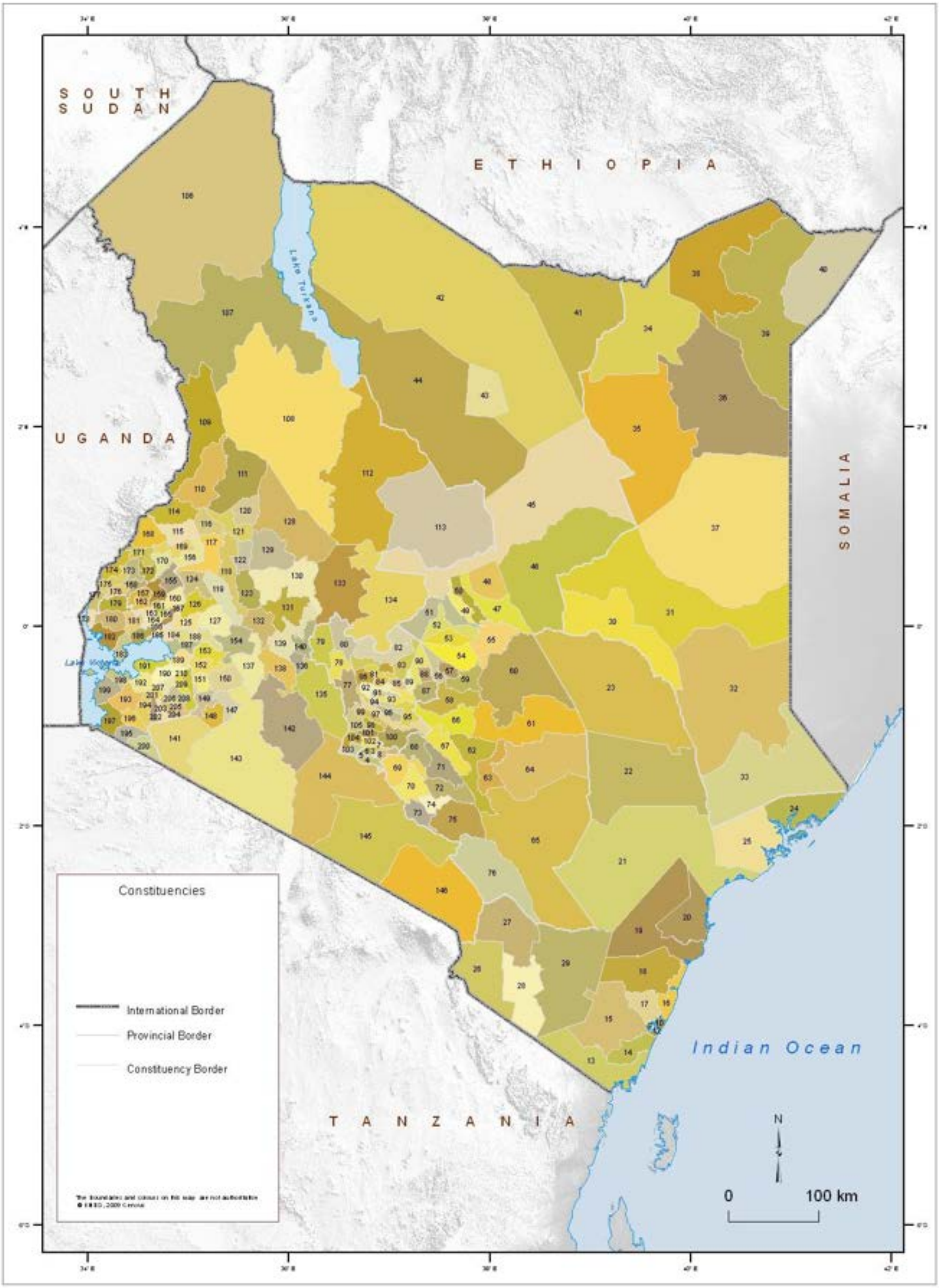
A.7: Kenya Constituencies

Kenya is politically divided into 210 constituencies. However, following the promulgation of the new Constitution, the number of Constituencies is to be increased to 290. Each constituency is represented by a Member of Parliament. During the 2009 KPHC data was also collected at both administrative and political levels. From the 2009 KPHC data, Embakasi Constituency in Nairobi had the highest population (925,775) while Lamu East Constituency in Coast Province had the least population (18,881). The constituencies are being used to channel devolved funds to accelerate development in the country. These funds are disbursed through Constituency Development Funds (CDF). Table A3 indicates the Constituency code and name and map A.7 shows spatial distribution of constituencies in the country.

Table A 3: Names and Code of Constituencies

Code	County	Countituency	Code	County	Countituency	Code	County	Countituency
1	Nairobi	Makadara	74	Makueni	Kaiti	147	Bomet	Bomet
2	Nairobi	Kamukunji	75	Makueni	Makueni	148	Bomet	Chepalungu
3	Nairobi	Starehe	76	Makueni	Kibwezi	149	Bomet	Sotik
4	Nairobi	Lang'ata	77	Nyandarua	Kinangop	150	Bomet	Konoin
5	Nairobi	Dagoretti	78	Nyandarua	Kipipiri	151	Bomet	Buret
6	Nairobi	Westlands	79	Nyandarua	Olkalou	152	Kericho	Belgut
7	Nairobi	Kasarani	80	Nyandarua	Ndaragwa	153	Kericho	Ainamoi
8	Nairobi	Embakasi	81	Nyeri	Tetu	154	Kericho	Kipkelion
9	Mombasa	Changamwe	82	Nyeri	Kieni	155	Kakamega	Malava
10	Mombasa	Kisauni	83	Nyeri	Mathira	156	Kakamega	Lugari
11	Mombasa	Likoni	84	Nyeri	Othaya	157	Kakamega	Mumias
12	Mombasa	Mvita	85	Nyeri	Mukurweini	158	Kakamega	Matungu
13	Kwale	Msambweni	86	Nyeri	Nyeri Town	159	Kakamega	Lurambi
14	Kwale	Matuga	87	Kirinyaga	Mwea	160	Kakamega	Shinyalu
15	Kwale	Kinango	88	Kirinyaga	Gichugu	161	Kakamega	Ikolomani
16	Kilifi	Bahari	89	Kirinyaga	Ndia	162	Kakamega	Butere
17	Kilifi	Kaloleni	90	Kirinyaga	Kirinyaga Central	163	Kakamega	Khwisero
18	Kilifi	Ganze	91	Murang'a	Kangema	164	Vihiga	Emuhaya
19	Kilifi	Malindi	92	Murang'a	Mathioya	165	Vihiga	Sabatia
20	Kilifi	Magarini	93	Murang'a	Kiharu	166	Vihiga	Vihiga
21	Tana River	Garsen	94	Murang'a	Kigumo	167	Vihiga	Hamisi
22	Tana River	Galole	95	Murang'a	Maragua	168	Bungoma	Mt Elgon
23	Tana River	Bura	96	Murang'a	Kandara	169	Bungoma	Kimilili
24	Lamu	Lamu East	97	Murang'a	Gatanga	170	Bungoma	Webuye
25	Lamu	Lamu West	98	Kiambu	Gatundu South	171	Bungoma	Sirisia
26	Taita Taveta	Taveta	99	Kiambu	Gatundu North	172	Bungoma	Kanduyi
27	Taita Taveta	Wundanyi	100	Kiambu	Juja	173	Bungoma	Bumula
28	Taita Taveta	Mwatate	101	Kiambu	Githunguri	174	Busia	Amagoro
29	Taita Taveta	Voi	102	Kiambu	Kiambaa	175	Busia	Nambale
30	Garissa	Dujis	103	Kiambu	Kikuyu	176	Busia	Butula
31	Garissa	Lagdera	104	Kiambu	Limuru	177	Busia	Funyula
32	Garissa	Fafi	105	Kiambu	Lari	178	Busia	Budalangi
33	Garissa	Ijara	106	Turkana	Turkana North	179	Siaya	Ugenya
34	Wajir	Wajir North	107	Turkana	Turkana Central	180	Siaya	Alego Usonga
35	Wajir	Wajir West	108	Turkana	Turkana South	181	Siaya	Gem
36	Wajir	Wajir East	109	West Pokot	Kacheliba	182	Siaya	Bondo
37	Wajir	Wajir South	110	West Pokot	Kapenguria	183	Siaya	Rarieda
38	Mandera	Mandera West	111	West Pokot	Sigor	184	Kisumu	Kisumu Town East
39	Mandera	Mandera Central	112	Samburu	Samburu West	185	Kisumu	Kisumu Town West
40	Mandera	Mandera East	113	Samburu	Samburu East	186	Kisumu	Kisumu Rural
41	Marsabit	Moyale	114	Trans Nzoia	Kwanza	187	Kisumu	Nyando
42	Marsabit	North Horr	115	Trans Nzoia	Saboti	188	Kisumu	Muhoroni
43	Marsabit	Saku	116	Trans Nzoia	Cherangany	189	Kisumu	Nyakach
44	Marsabit	Laisamis	117	Uasin Gishu	Eldoret North	190	Homa Bay	Kasipul/Kabondo
45	Isiolo	Isiolo North	118	Uasin Gishu	Eldoret East	191	Homa Bay	Karachuonyo
46	Isiolo	Isiolo South	119	Uasin Gishu	Eldoret South	192	Homa Bay	Rangwe
47	Meru	Igembe South	120	Elgeyo-Marakwet	Marakwet East	193	Homa Bay	Ndhiwa
48	Meru	Igembe North	121	Elgeyo-Marakwet	Marakwet West	194	Migori	Rongo
49	Meru	Tigania West	122	Elgeyo-Marakwet	Keiyo North	195	Migori	Migori
50	Meru	Tigania East	123	Elgeyo-Marakwet	Keiyo South	196	Migori	Uriri
51	Meru	North Imenti	124	Nandi	Mosop	197	Migori	Nyatike
52	Meru	Central Imenti	125	Nandi	Aldai	198	Homa Bay	Mbita
53	Meru	South Imenti	126	Nandi	Emgwen	199	Homa Bay	Gwassi
54	Tharaka	Nithi	127	Nandi	Tinderet	200	Migori	Kuria
55	Tharaka	Tharaka	128	Baringo	Baringo East	201	Kisii	Bonchari
56	Embu	Manyatta	129	Baringo	Baringo North	202	Kisii	South Mugirango
57	Embu	Runyenjes	130	Baringo	Baringo Central	203	Kisii	Bomachoge
58	Embu	Gachoka	131	Baringo	Mogotio	204	Kisii	Bobasi
59	Embu	Siakago	132	Baringo	Eldama Ravine	205	Kisii	Nyaribari Masaba
60	Kitui	Mwingi North	133	Laikipia	Laikipia West	206	Kisii	Nyaribari Chache
61	Kitui	Mwingi South	134	Laikipia	Laikipia East	207	Kisii	Kitutu Chache
62	Kitui	Kitui West	135	Nakuru	Naivasha	208	Nyamira	Kitutu Masaba
63	Kitui	Kitui Central	136	Nakuru	Nakuru Town	209	Nyamira	West Mugirango
64	Kitui	Mutito	137	Nakuru	Kuresoi	210	Nyamira	North Mugirango Borabu
65	Kitui	Kitui South	138	Nakuru	Molo			
66	Machakos	Masinga	139	Nakuru	Rongai			
67	Machakos	Yatta	140	Nakuru	Subukia			
68	Machakos	Kangundo	141	Narok	Kilgoris			
69	Machakos	Kathiani	142	Narok	Narok North			
70	Machakos	Machakos Town	143	Narok	Narok South			
71	Machakos	Mwala	144	Kajiado	Kajiado North			
72	Makueni	Mbooni	145	Kajiado	Kajiado Central			
73	Makueni	Kilome	146	Kajiado	Kajiado South			

A.7: Kenya Constituencies



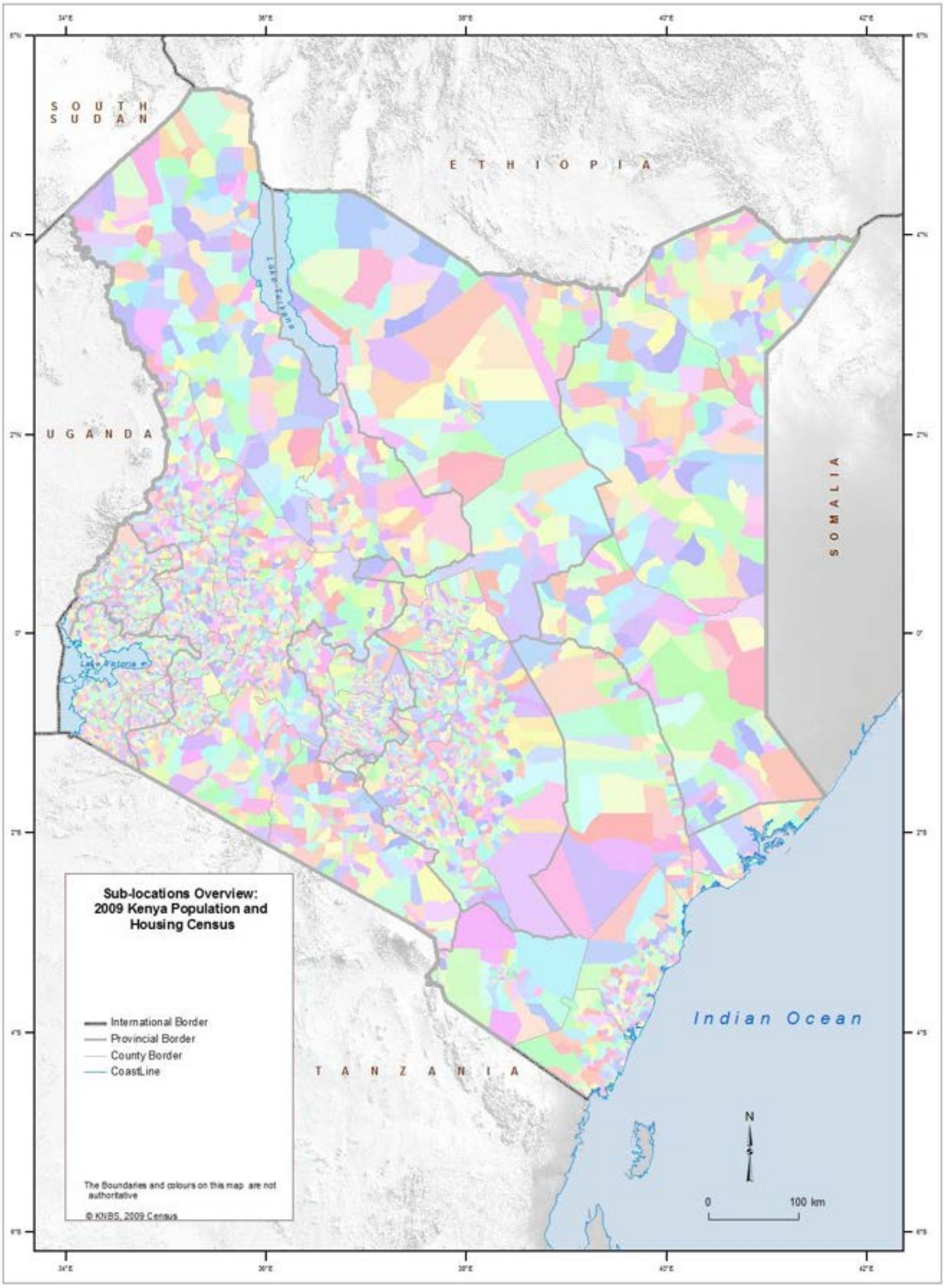
A.8: Overview of Sub Locations

In Kenya's administrative hierarchy, the sub-location is the lowest administrative unit. Over the years the numbers of sub-locations have been increasing. They were 7,149 sub locations during the 2009 KPHC, while in 1999, 1889, 1979 and 1969 there were 6,612, 3,553,, 3111 and 2,410 Sub- locations respectively. The increase in the number of sub-locations has been necessitated by the government's endeavour to bring administration closer to the people. Enumeration Areas (EAs) used during censuses are usually delineated within the sub location. The number of sub locations varies from county to county with Meru County having the highest (325) and Mombasa County the lowest (34). Table A4 indicates counties by number of sub locations while map A.8 shows the distribution of sub-locations during the 2009 KPHC.

Table A 4: Counties by Number of Sub locations

S/No	County	No. Of Sub locations	S/No	County	No. Of Sub locations
1	Nairobi	112	25	Kisumu	168
2	Nyandarua	80	26	Migori	164
3	Nyeri	196	27	Homa Bay	211
4	Kirinyaga	81	28	Kisii	167
5	Murang'a	201	29	Nyamira	74
6	Kiambu	193	30	Turkana	158
7	Mombasa	34	31	West Pokot	198
8	Kwale	84	32	Samburu	108
9	Kilifi	171	33	Trans Nzoia	57
10	Tana River	93	34	Baringo	270
11	Lamu	39	35	Uasin Gishu	97
12	Taita Taveta	90	36	Elgeyo-Marakwet	180
13	Marsabit	114	37	Nandi	289
14	Isiolo	44	38	Laikipia	79
15	Meru	325	39	Nakuru	210
16	Tharaka	123	40	Narok	185
17	Embu	112	41	Kajiado	143
18	Kitui	317	42	Kericho	158
19	Machakos	225	43	Bomet	223
20	Makueni	202	44	Kakamega	231
21	Garissa	92	45	Vihiga	115
22	Wajir	108	46	Bungoma	149
23	Mandera	119	47	Busia	181
24	Siaya	179			

A.8: Kenya sub location map



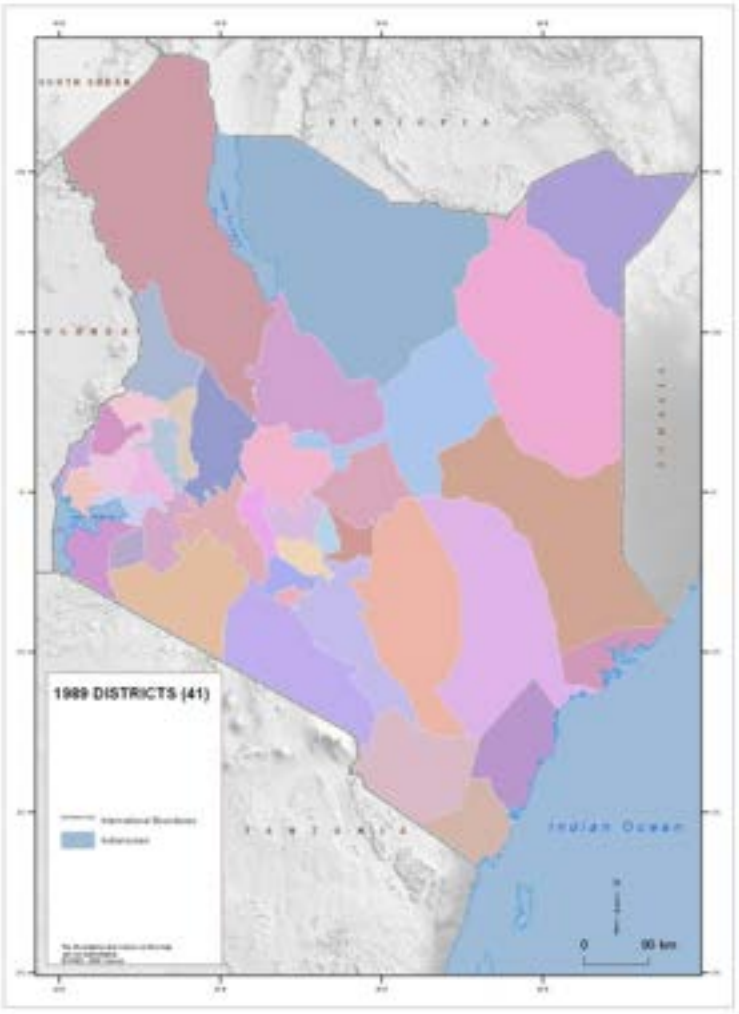
A.9: Changes in Administrative Units 1969 to 2009

In an effort to bring administration closer to the people and in cognizance of the population growth, Kenya has made several changes in administrative units' over the years. These maps show the historical changes in the administrative units from 1989 census when the country had 8 provinces and 41 districts. The three maps describe the administrative units of Kenya in 1989, 1999 and 2009. Changes in the administrative units especially below the province, are usually numerous in the intercensal periods as shown on the Table A5 below. Prior to the current status as shown on map A.5 there have been considerable changes in the number of districts since 1969 census. The Population Censuses of 1969, 1979 and 1989 reported 41 districts as shown in map A.9.A, while in 1999 they increased to 70 (see map A.9.B), and more than doubled in 2009 to 158. Changes between 1989 and 1999 and between 1999 and 2009 are shown in maps A.9.A, A.9.B, A.9.C and D, respectively

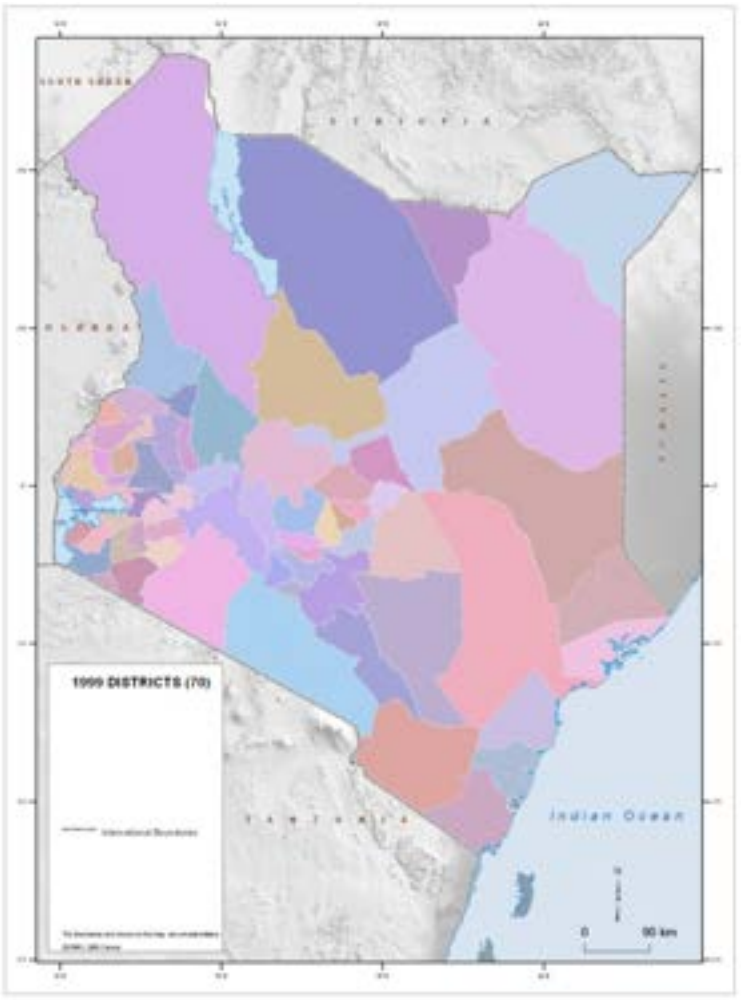
Table A 5: Changes in the number of Administrative units between the last five Population Censuses

Administrative Units	Year				
	1969	1979	1989	1999	2009
Kenya	1	1	1	1	1
Province	8	8	8	8	8
Districts	41	41	41	70	158
Divisions	154	184	260	497	635
Locations	567	618	1,099	2,427	2,728
Sub-Locations	2410	3111	3,553	6,612	7,149
Enumeration Areas	20,000	25,000	36,979	61,921	96,252

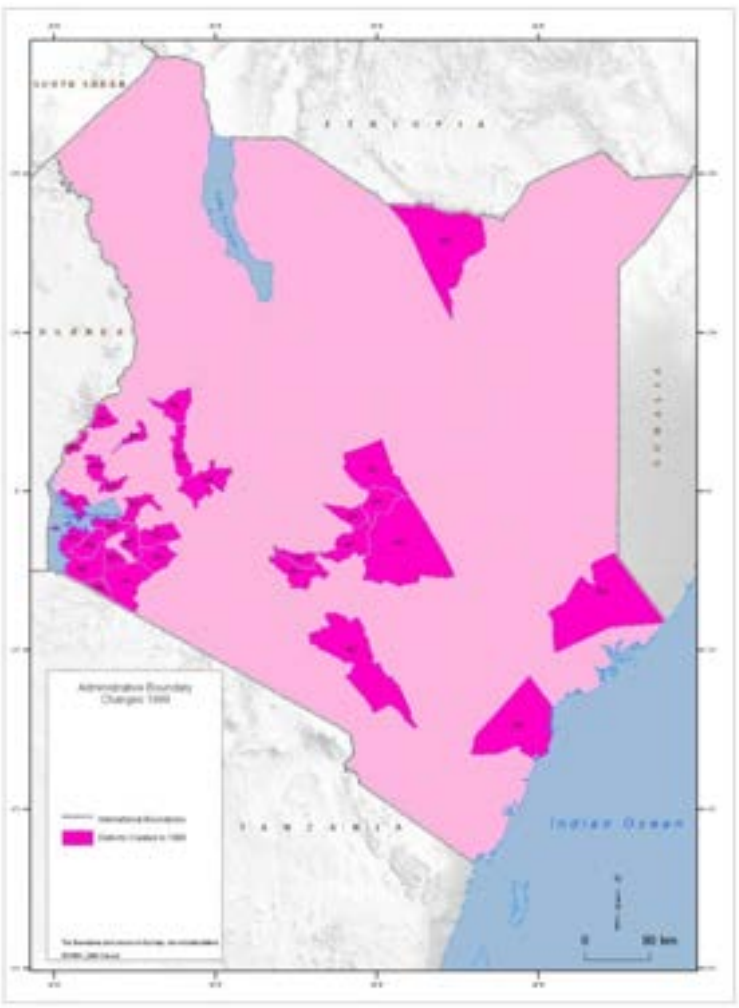
A.9. A.1969, 1979 & 1989 Administrative, Districts



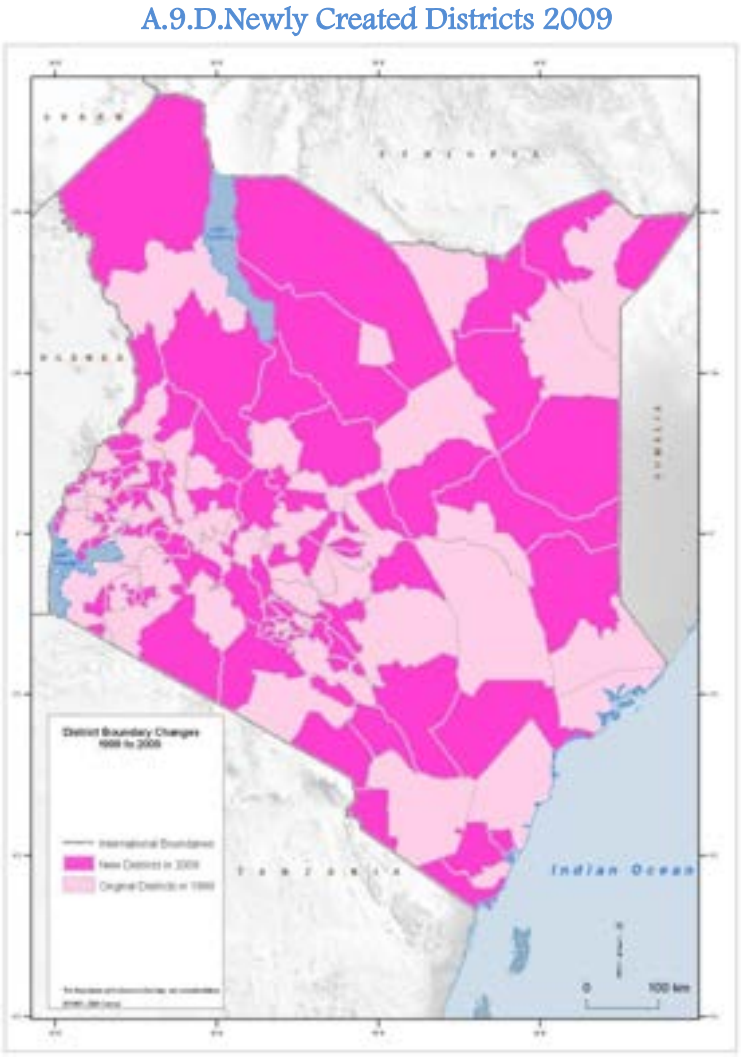
A.9. B.1999 Administrative Districts



A.9.C.Newly Created Districts 1999



A.9.D.Newly Created Districts 2009



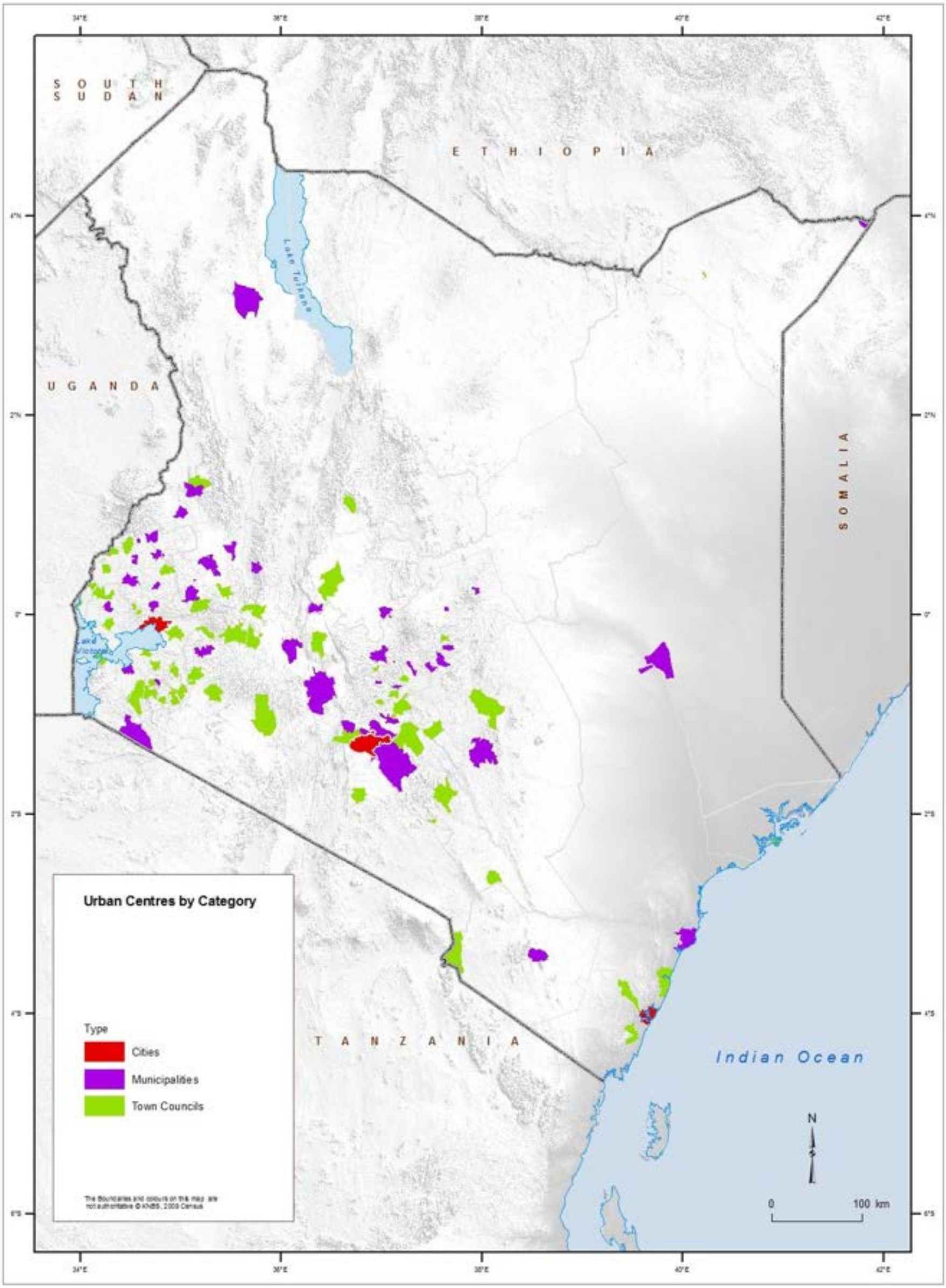
A.10: Urban Centres

Map A.10 show the distribution of major urban centers in Kenya. The Red areas are the three cities, the purple coloured areas are the Municipalities. The light green colour shows the Town Councils. Most of the urban centers are concentrated within the Eastern and Western Highlands. Table A.6 below is a summary of all the major urban centres in Kenya showing the County name, Town code, Town name and Town type.

Table A 6: Major Urban Centers in Kenya

County Name	Town Code	Town Name	Town Type	County Name	Town Code	Town Name	Town Type	County Name	Town Code	Town Name	Town Type
Nairobi	1	Nairobi	City	Nakuru	39	Nakuru	Municipality	Siaya	77	Bondo	Town Council
Mombasa	2	Mombasa	City	Nakuru	40	Naivasha	Municipality	Kisumu	78	Ahero	Town Council
Kisumu	3	Kisumu	City	Kericho	41	Kericho	Municipality	Kisumu	79	Ahero	Town Council
Nyeri	4	Nyeri	Municipality	Kakamega	42	Kakamega	Municipality	Kisumu	80	Muhoroni	Town Council
Nyeri	5	Karatina	Municipality	Bungoma	43	Webuye	Municipality	Migori	81	Awendo	Town Council
Kirinyaga	6	Kerugoya/Kutus	Municipality	Vihiga	44	Vihiga	Municipality	Homa Bay	82	Mbita	Town Council
Murang'a	7	Muranga	Municipality	Kakamega	45	Mumias	Municipality	Homa Bay	83	Kendu Bay	Town Council
Murang'a	8	Kangema	Municipality	Bungoma	46	Bungoma	Municipality	Homa Bay	84	Oyugis	Town Council
Kiambu	9	Kiambu	Municipality	Bungoma	47	Kimilili	Municipality	Migori	85	Rongo	Town Council
Kiambu	10	Limuru	Municipality	Bungoma	48	Chwele	Municipality	Nyamira	86	Keroka	Town Council
Kiambu	11	Thika	Municipality	Busia	49	Busia	Municipality	Kisii	87	Suneka	Town Council
Kiambu	12	Ruiru	Municipality	Nyandarua	50	Ol Kalou	Town Council	Kisii	88	Masimba	Town Council
Kilifi	13	Malindi	Municipality	Nyandarua	51	Oljororok	Town Council	Kisii	89	Ogembo	Town Council
Taita Taveta	14	Voi	Municipality	Nyeri	52	Othaya	Town Council	Kisii	90	Nyamache	Town Council
Meru	15	Meru	Municipality	Kirinyaga	53	Sagana	Town Council	Kisii	91	Nyamarambe	Town Council
Tharaka	16	Chuka	Municipality	Murang'a	54	Kandara	Town Council	Kisii	92	Tabaka	Town Council
Meru	17	Maua	Municipality	Murang'a	55	Makuyu	Town Council	Nyamira	93	Nyamira	Town Council
Embu	18	Embu	Municipality	Murang'a	56	Maragwa	Town Council	Nyamira	94	Nyansiongo	Town Council
Embu	19	Runyenjes	Municipality	Murang'a	57	Makutano	Town Council	West Pokot	95	Chepareria	Town Council
Kitui	20	Kitui	Municipality	Kiambu	58	Karuri	Town Council	Samburu	96	Maralal	Town Council
Machakos	21	Mavoko	Municipality	Kiambu	59	Kikuyu	Town Council	Baringo	97	Eldama Ravine	Town Council
Machakos	22	Machakos	Municipality	Kwale	60	Kwale	Town Council	Uasin Gishu	98	Burnt Forest	Town Council
Garissa	23	Garissa	Municipality	Kilifi	61	Kilifi	Town Council	Nandi	99	Nandi Hills	Town Council
Mandera	24	Mandera	Municipality	Kilifi	62	Mariakani	Town Council	Laikipia	100	Rumuruti	Town Council
Siaya	25	Siaya	Municipality	Lamu	63	Lamu	Town Council	Nakuru	101	Molo	Town Council
Homa Bay	26	Homa Bay	Municipality	Taita Taveta	64	Taveta	Town Council	Narok	102	Narok	Town Council
Migori	27	Migori	Municipality	Marsabit	65	Moyale	Town Council	Kajiado	103	Kajiado	Town Council
Migori	28	Kehanja	Municipality	Tharaka	66	Chogoria	Town Council	Kericho	104	Kipkelion	Town Council
Kisii	29	Kisii	Municipality	Kitui	67	Mwingi	Town Council	Kericho	105	Londiani	Town Council
Turkana	30	Lodwar	Municipality	Machakos	68	Matuu	Town Council	Bomet	106	Litein	Town Council
West Pokot	31	Kapenguria	Municipality	Machakos	69	Kangundo-Tala	Town Council	Bomet	107	Sotik	Town Council
Trans Nzoia	32	Kitale	Municipality	Makueni	70	Wote	Town Council	Bomet	108	Bomet	Town Council
Baringo	33	Kabarnet	Municipality	Makueni	71	Mtito Andei	Town Council	Kakamega	109	Malava	Town Council
Uasin Gishu	34	Eldoret	Municipality	Makueni	72	Emali	Town Council	Vihiga	110	Luanda	Town Council
Elgeyo-Marakwet	35	Iten/Tambach	Municipality	Mandera	73	Takaba	Town Council	Bungoma	111	Malakisi	Town Council
Nandi	36	Kapsabet	Municipality	Siaya	74	Ukwala	Town Council	Bungoma	112	Sirisia	Town Council
Nyeri	37	Nanyuki	Municipality	Siaya	75	Ugunja	Town Council	Busia	113	Nambale	Town Council
Laikipia	38	Nyahururu	Municipality	Siaya	76	Yala	Town Council	Busia	114	Malaba	Town Council
								Busia	115	Funyula	Town Council
								Busia	116	Port Victoria	Town Council

A.10: Urban Centers



A.11: Religion

Religion is a collection of cultural systems, belief systems, and world views that establishes symbols relating to human spirituality and, sometimes, moral values. Many religions have narratives, symbols, traditions and sacred histories that are intended to give meaning to life or to explain the origin of life or the universe. They tend to derive morality, ethics, religious laws or a preferred life style from their ideas about the cosmos and human nature.[9]

During the 2009 KPHC, information on religion was collected. Eight categories of religion were identified namely; Protestant, Catholic, Hindu, Muslim, Other Christian, Other Religion, Traditionalists and No religion. The predominant religion in Kenya is Christianity (Protestant, Other Christians and Catholics) with about 80.0 per cent of followers out of the entire population while Islam is the religion practiced by approximately 11.2 per cent of the Kenyan population.

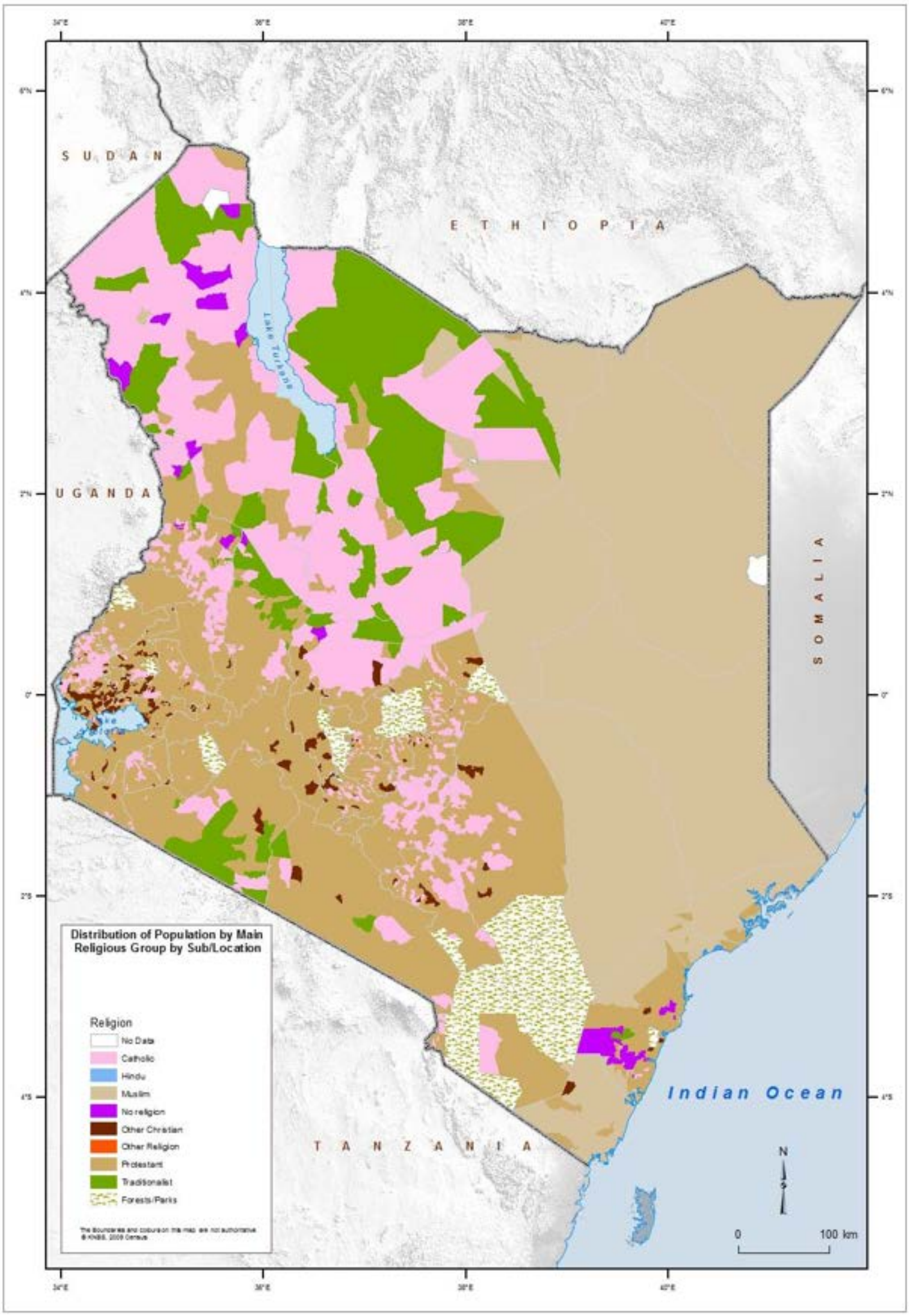
Map A.11 shows that Protestant is the main religion in Western, Nyanza, Central, Rift Valley, Eastern and part of Coast provinces and is shown by light brown colour. Islam is predominant in North Eastern and Coast Provinces on the map this is depicted by the beige colour. On other hand Catholics are shown in pink colour and are spread throughout the country except in North Eastern and Coast Provinces. Traditionalists (dark green colour) are mainly found in sub locations falling in Marsabit, Turkana, Samburu, Baringo and Narok Counties with a few in Isiolo and Kilifi Counties. Those reporting as having "no religion" are (purple colour) found in Turkana, Baringo, West Pokot, Laikipia and Kilifi Counties. Hindu (shown in blue colour) is mainly located in the capital of Kenya, Nairobi, and other urban areas such as Mombasa, Eldoret, and Kisumu. Those who recorded "other religion" (red colour) were found to be mainly in sub locations in Nyeri County. Table A7 below shows the number of persons in each religion.

Table A.7: Religious Affiliation

RELIGION	TOTAL
Catholic	9,010,684
Protestant	18,307,466
Other Christian	4,559,584
Muslim	4,304,798
Hindu	53,393
Traditionalist	635,352
Other Religion	557,450
No Religion	922,128
Don't Know	61,233

[9] http://www.en.wikipidia.org/wiki.religion

A.11: Distribution of Religion among the Population



B: General Demographic Characteristics

The population of a country is one of its most precious resources. It is therefore of crucial interest to know its size, composition and spatial distribution. Since the 1969, census has become part of the government's strategy to collect statistics and has been carried out decennially. In 1948 the population was 5.4 million, in 1962 it increased to 8.6 million, 1969 the number rose to 10.9 million, in1979; about15.3 million people were recorded while in 1989 those enumerated were 21.4 million People and in 1999 population rose to 28.7 million.

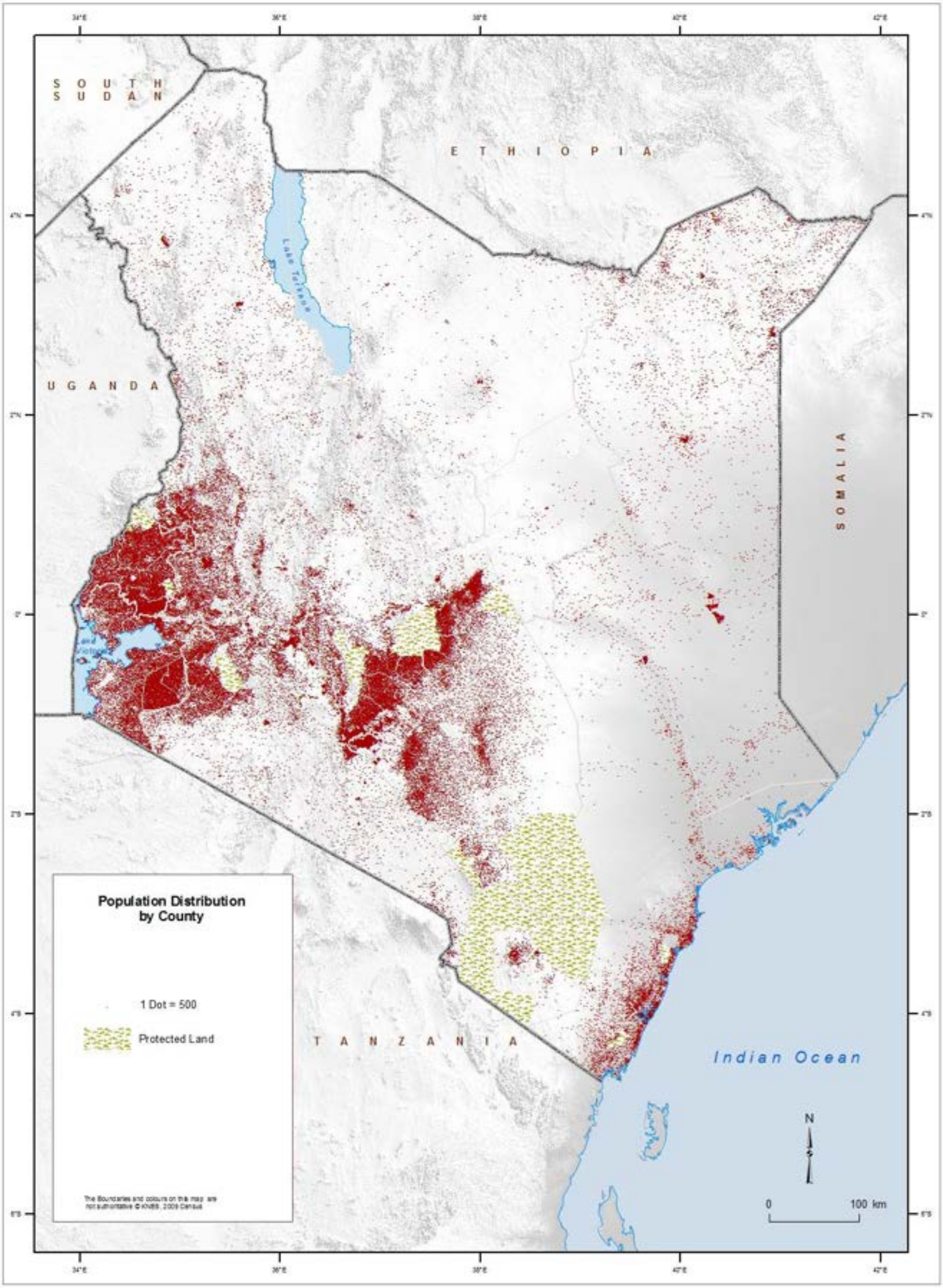
The 2009 KPHC revealed that on August 24th /25th there were 38.6 million Kenyans, out of which 19, 192,458 were males and 19, 417,639 were females. The age pyramid of Kenya continues to be broad based with 53.7 percent of the total population being younger than 20 years. The annual growth rate was 2.9 percent while the absolute increase was about 10 million people. The population is projected to increase to 50,319,253 in 2020 and 63,859,547 in 2030. The section covers sub-sections on population distribution, population density, population distribution as well as structure of population in terms of age and sex ratios.

B.1: Population Distribution

Population density and distribution are closely related parameters. Density is a qualitative descriptor while distribution comprises different quantitative parameters like location, age and sex. Population Distribution is the arrangement or spread of people living in a given area; it is essentially how the population of an area is arranged according to variables such as age, ethnicity, or sex.

Map B.1 is a numerical representation of the population distribution where one dot represents 500 people. The distribution map and the density map show a similar pattern with concentration of population in Nairobi, Western, Nyanza, and Central Provinces, coastal strip and the urban areas. These are the high potential regions in the country in terms of favourable climate and employment opportunities. North Eastern, parts of Eastern, parts of the Rift Valley and Coast provinces are sparsely populated. These are the arid and semi arid lands where drought is most common.

B.1: Population Distribution by County

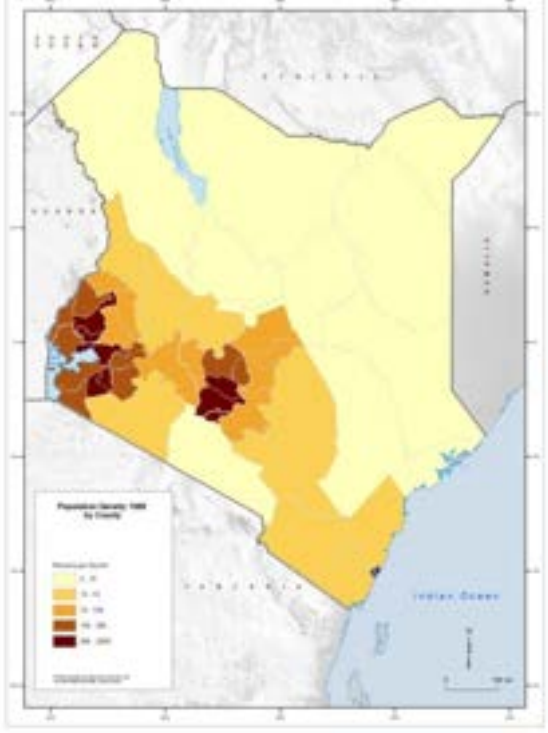


B.2: Population Density

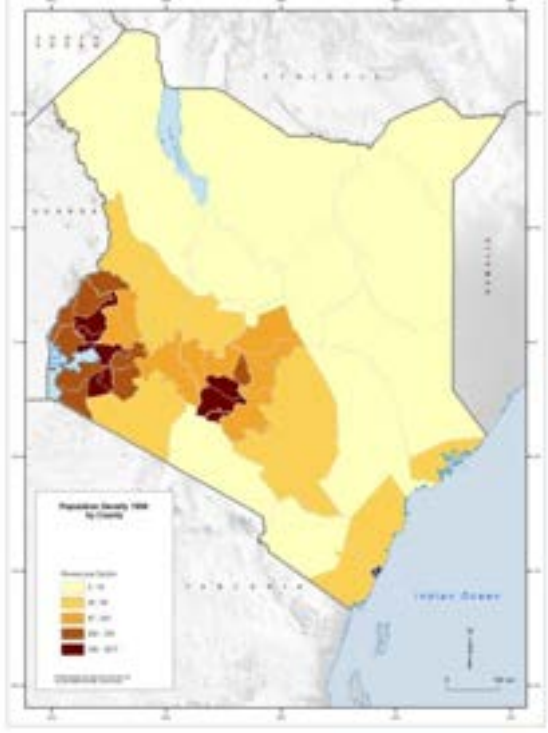
Population density refers to the number of people in a defined jurisdiction, in relation to the size of the area they occupy. It is calculated by dividing the number of people living in a particular region by its area. The density indicates where people are and how many people occupy a given area. Normally, the population density is higher in urban and well endowed rural areas. Under population density, we have five density maps. The following maps B.2 A, B and C display population densities for the years 1989, 1999 and 2009 at county level respectively. These three maps can be compared to show population density for the last thirty years.

The last two maps display population density at the district and sub location levels where lighter hues indicate lower densities while darker hues show higher population density. Map B.2:D shows population density by district as per the 2009 KPH**C.**From the B.2:D, the ten districts with high densities are: Nairobi North; Nairobi East; Kilindini; Mombasa; Nairobi West; Westlands; Kiambu; Kikuyu; Vihiga and Emuhaya. It should be noted that the first six districts are urban districts and the last four are rural districts. On the other hand the districts with low densities are: Chalbi; Laisamis; Garbatulla; Fafi, Tana Delta; Tana River; Wajir South; Samburu East; Ijara and Samburu. Map B.2:E is a high resolution density map and depicts sub locations with the highest densities. It should be noted that sub locations with high density are in Nairobi, Western, Nyanza and Central Provinces and are scattered in major urban centres. Map B.2:E clearly indicates that Kenya is sparsely populated with an average density of 46 persons per sq kilometer. This information is vital and can be used by the Government to determine where services like Health, Education and Transportation may be required in the future.

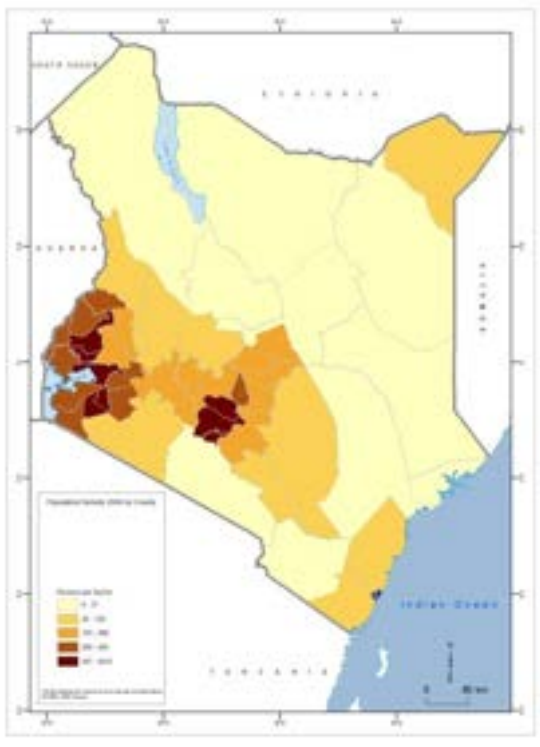
B.2: A.Population Density by County – 1989



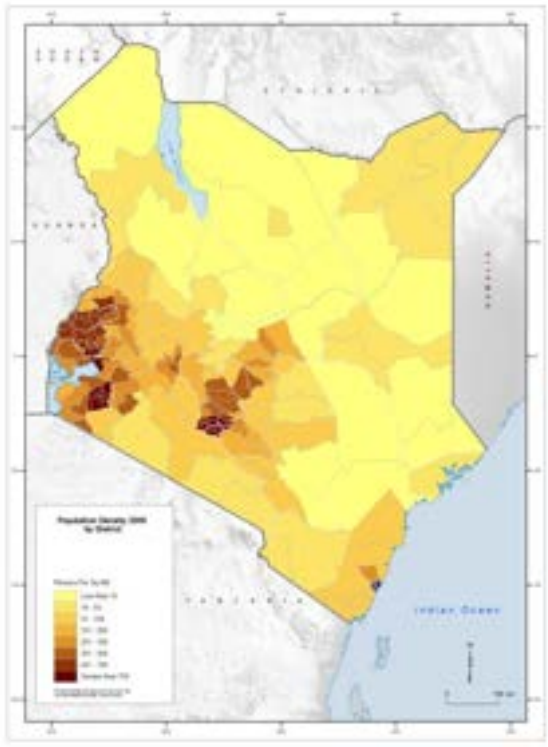
B.2:B.Population Density by County –1999



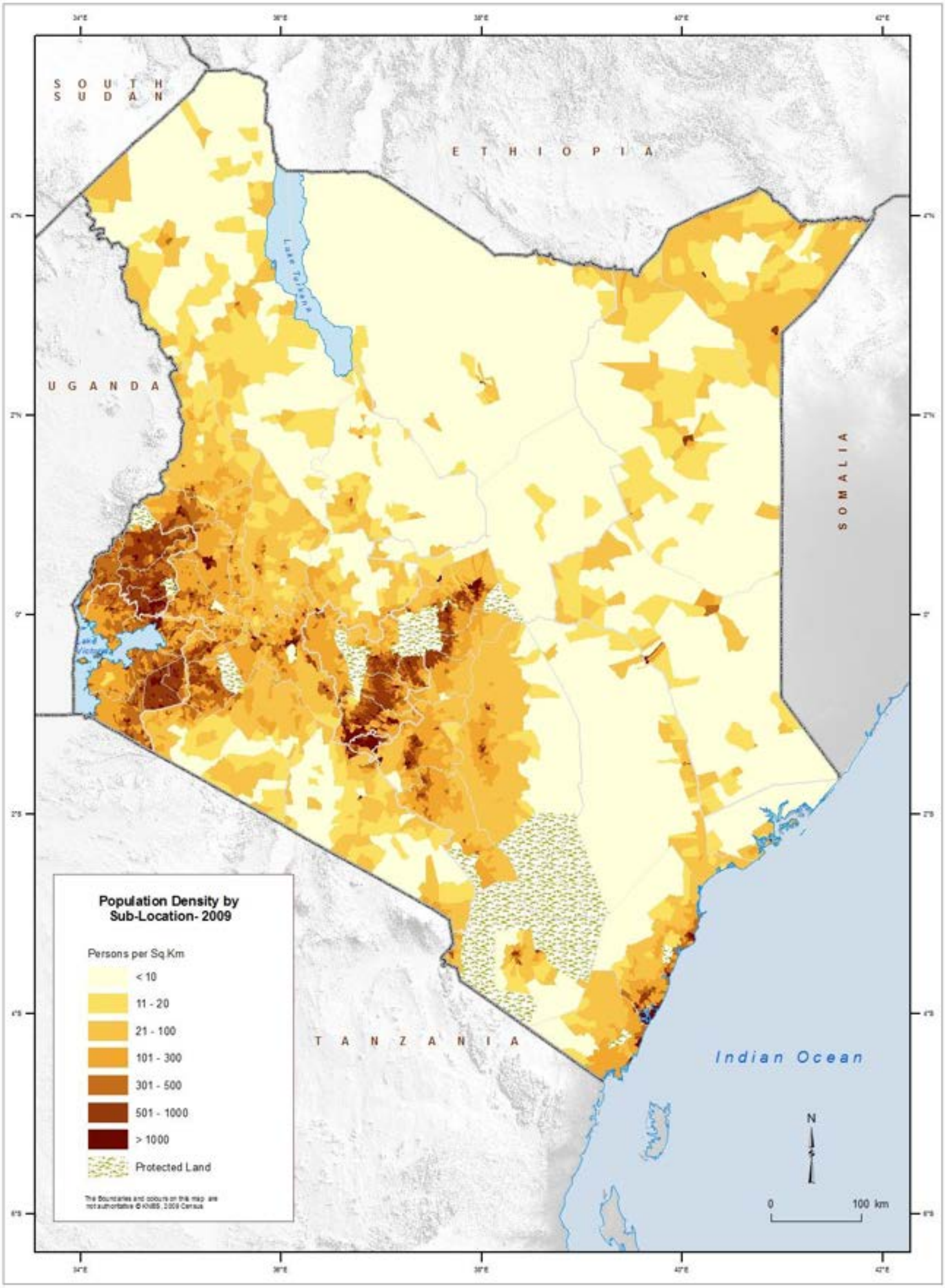
B.2:C.Population Density by County – 2009



B.2:D.Population Density by District – 2009



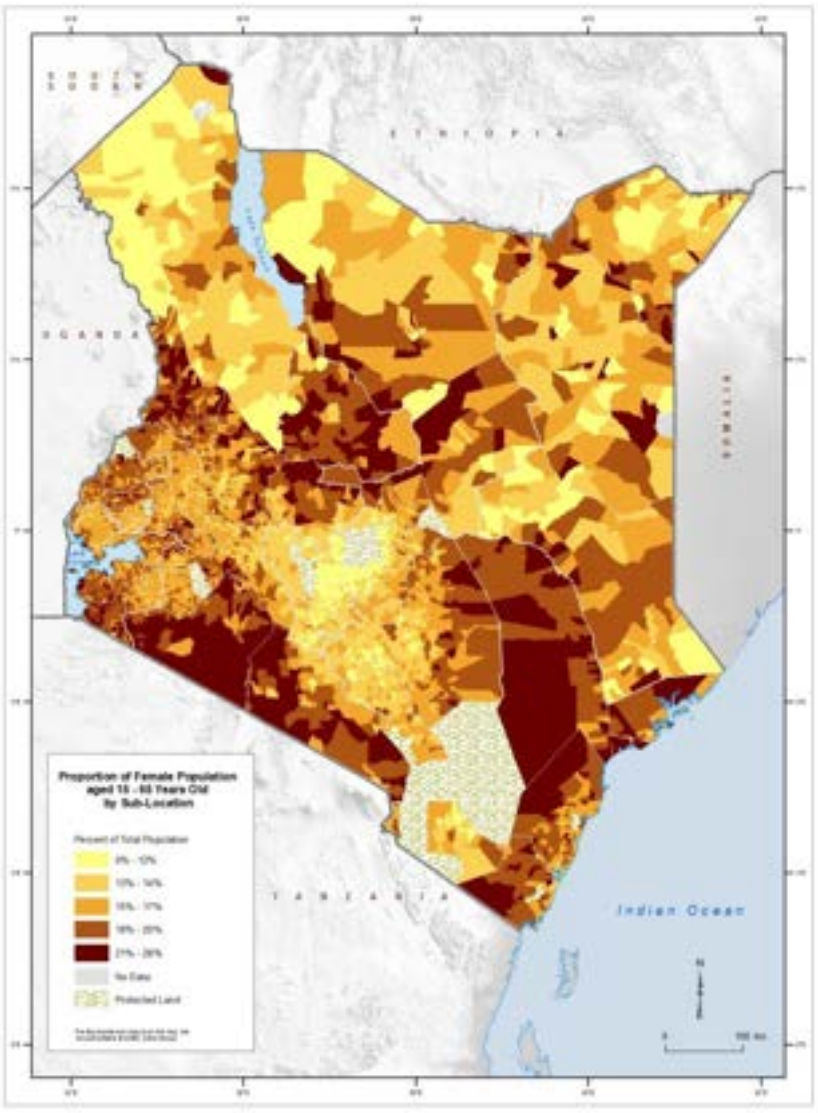
B.2: E Population Density by Sub-Locations - 2009



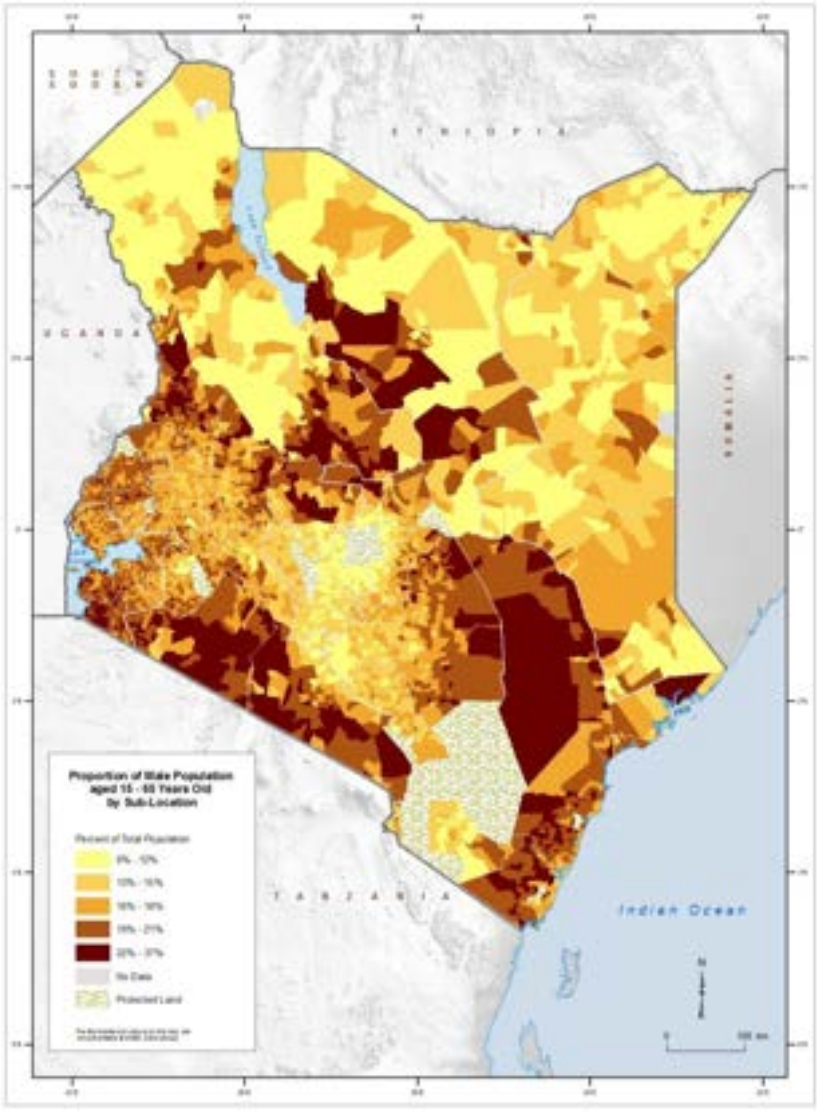
B.3: Population Distribution by Age Groups and Sex

Population distribution by age and sex is important in determining among others the economic activity and dependency ratio. The high resolution maps displayed below are on various age groups by sex. Maps B.3: A and B show the distribution of economically active population by sub location and sex. The yellow colour in the maps depicts sub locations with less than 45.0 per cent of the population aged between 15-65 years for both sexes. The dark brown colour shows sub locations with over 60.0 per cent of population aged 15 to 65 years by sex. Maps B.3 C to H generally display the dependant population by age and sex. The result of the 2009 population census shows that Kenya's population is youthful. With those aged 0 to 20 years comprising 53.7 per cent of the total population. The 2009 data reveals that about 46. 4 per cent are dependants (age 0-14 - 42.9 per cent and above 65 years- 3.5 per cent). While the economically active were found to be 53.6 per cent of the total population of which 54.1 per cent are females and 53.1 per cent are males. These maps can assist the decision makers to come up with intervention strategies to address the needs of the various age groups.

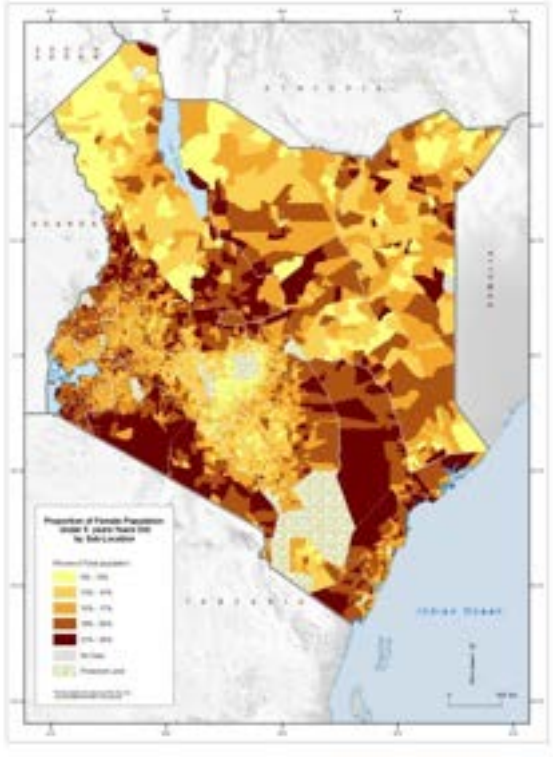
B.3: A.Distribution of Female Population aged 15-65



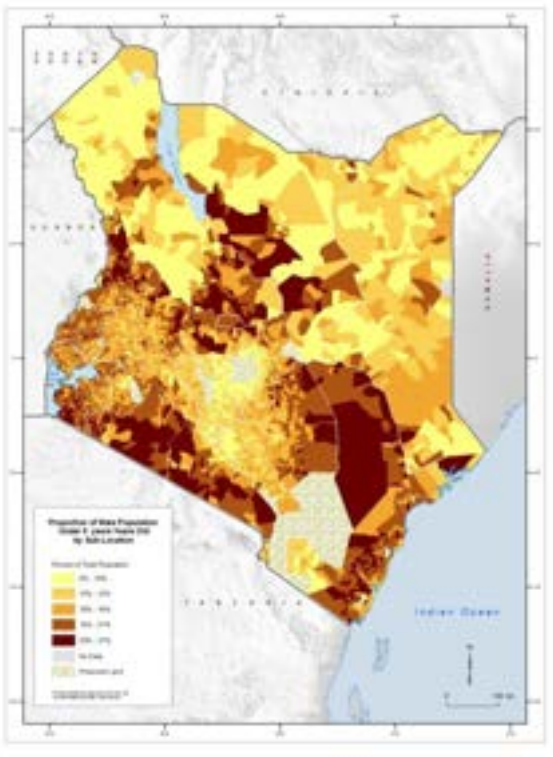
B.3: B.Distribution of Male Population aged 15-65



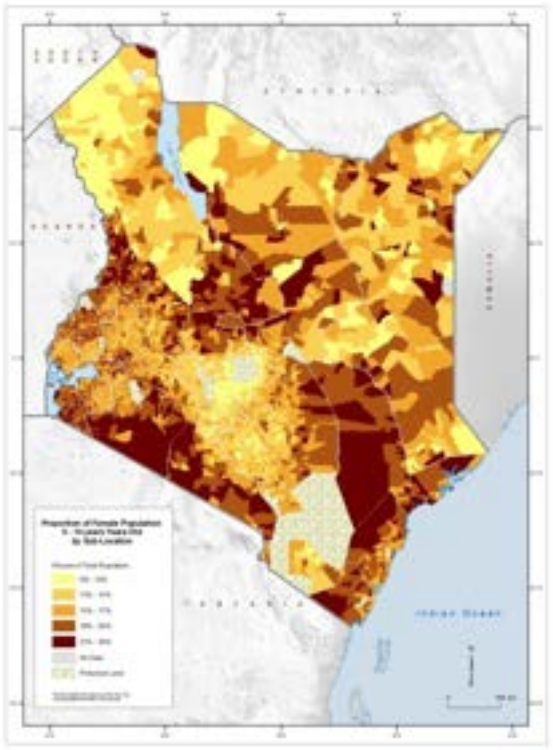
B.3: C.Distribution Female Population under 5 years



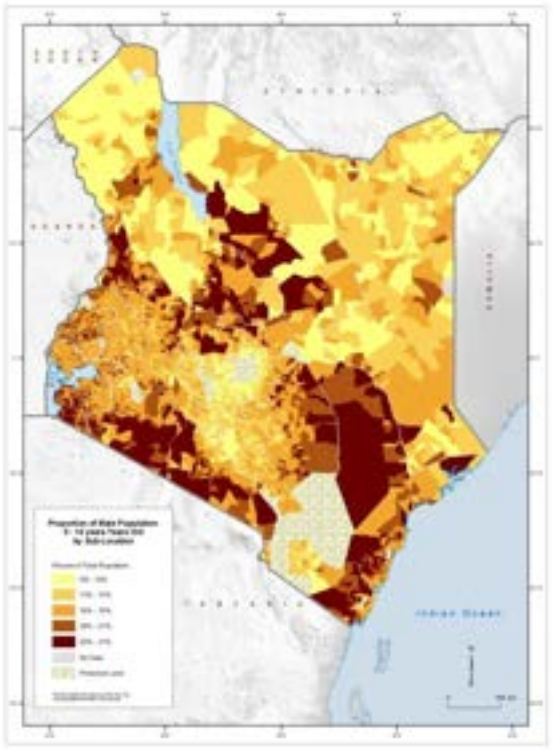
B.3: D.Distribution Male Population under 5 years



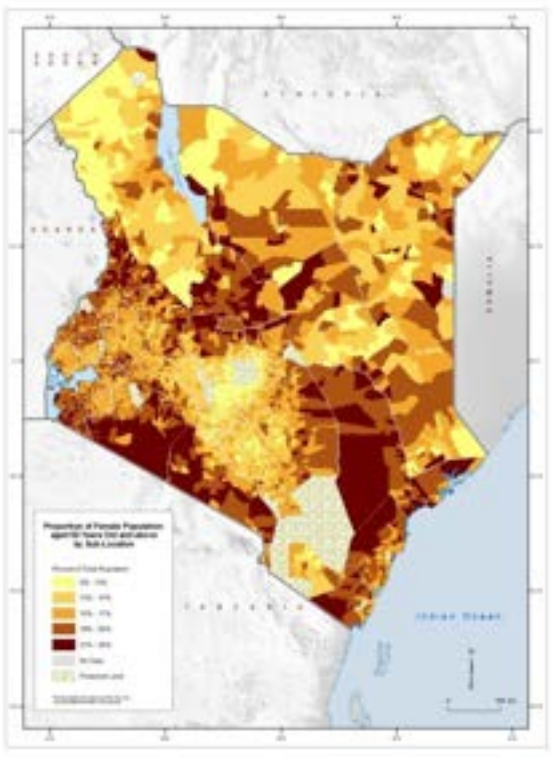
B.3: E.Female Population 0 – 14 years



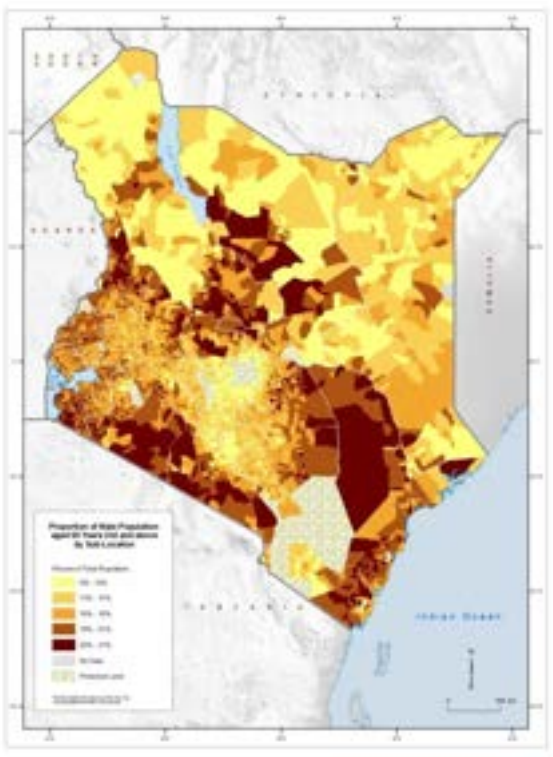
B.3: F.Male Population 0 – 14 years



B.3: G.Female Population over 65 years



B.3: H. Male Population over 65 years



B.4: General Sex Ratio

Sex ratio refers to the number of males to females in a population. It is therefore a measure of the balance between the sexes. Generally there are three types of commonly used sex ratio: sex ratio at birth, general sex ratio and sex ratio by age. These different types of sex ratio are calculated as follows:

I) Sex Ratio at Birth (SRB) = total male births in an area in a year divide by total female births in that area in the same year, multiply by 100.

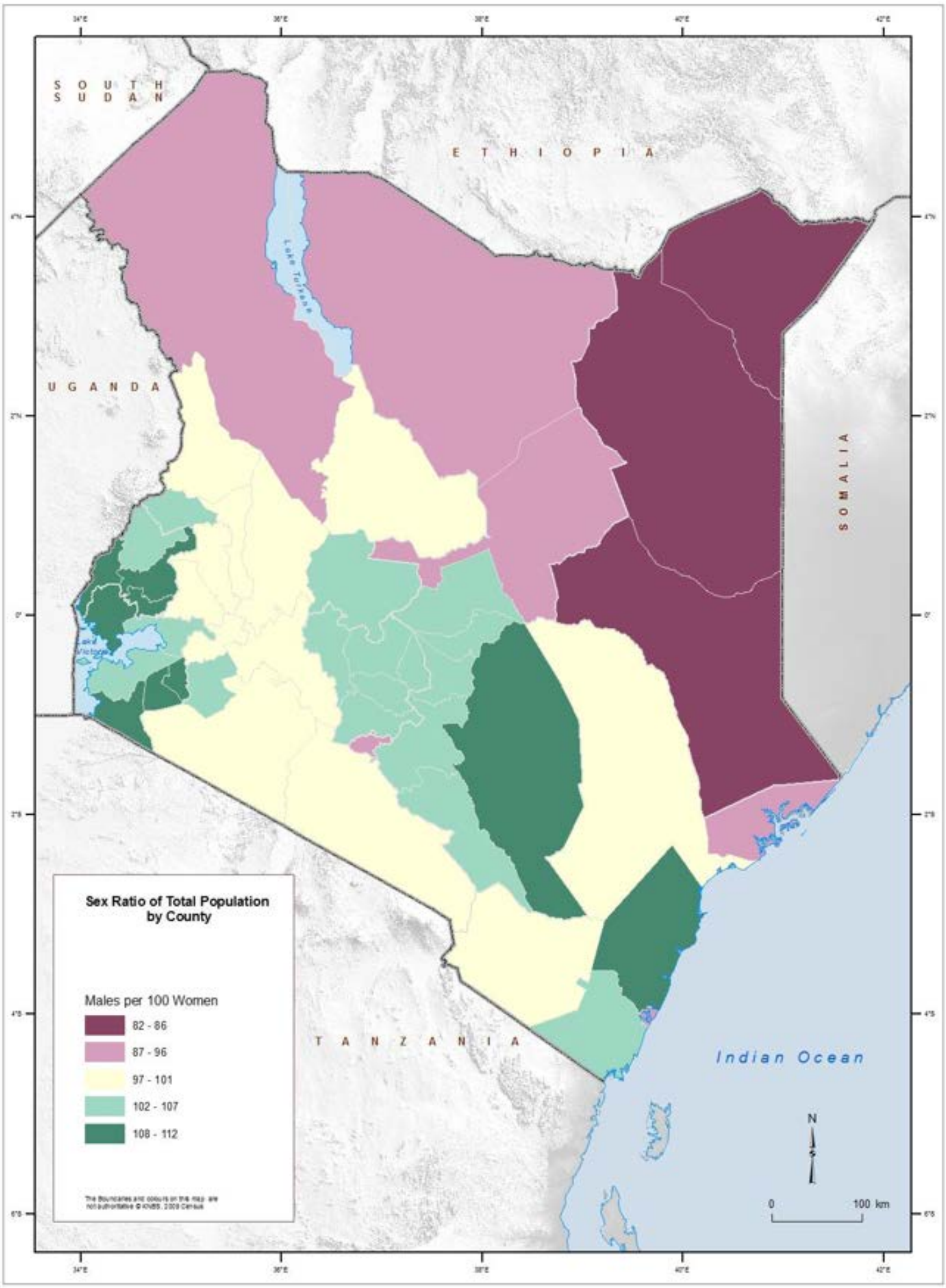
II) General Sex Ratio (GSR) =All males in a population of an area divide by all female population of the same area, multiply by 100.

III) The Sex Ratio by Age (SRA), also referred to as Age-Specific Sex Ratio (ASSR) is the number of males per 100 females in each age group. It is calculated the same way as other sex ratios, except that population of males and females in each age group is used.

The general pattern of the age-specific sex ratio is that they are approximately equal to the sex ratio at birth in the younger ages and reduce gradually with older ages. Generally the common sex ratio at birth for most communities in Africa is 1.02-1.05. For example, sex ratios of 1.0 mean the number of male births equal female births. A sex ratio of 1.02 means that for every 100 female births there are 102 male births. Any value that is less than 1.0 for the adult population means there are more females than males in the population.

Map B.4 showing the distribution of sex ratio by county is based on the GSR. In 2009 KPHC the following counties had very high sex ratios of between 108-112 males per 100 females: Kilifi, Kitui, Migori, Kisii, Nyamira, Siaya, Kakamega and Busia. On the other hand, the following counties had very low sex ratio of between 82-86 males per 100 females: Mandera, Wajir, and Garissa. Note that most counties in the highlands of Central and Western Kenya also have high sex ratios ranging between 102-107 males per 100 females, while the counties in the surrounding lowlands and dry lands had sex ratios that ranged between 87-101 males per 100 females.

B.4: Sex Ratio of Total Population by County



Section C: Fertility and Nuptiality

Introduction

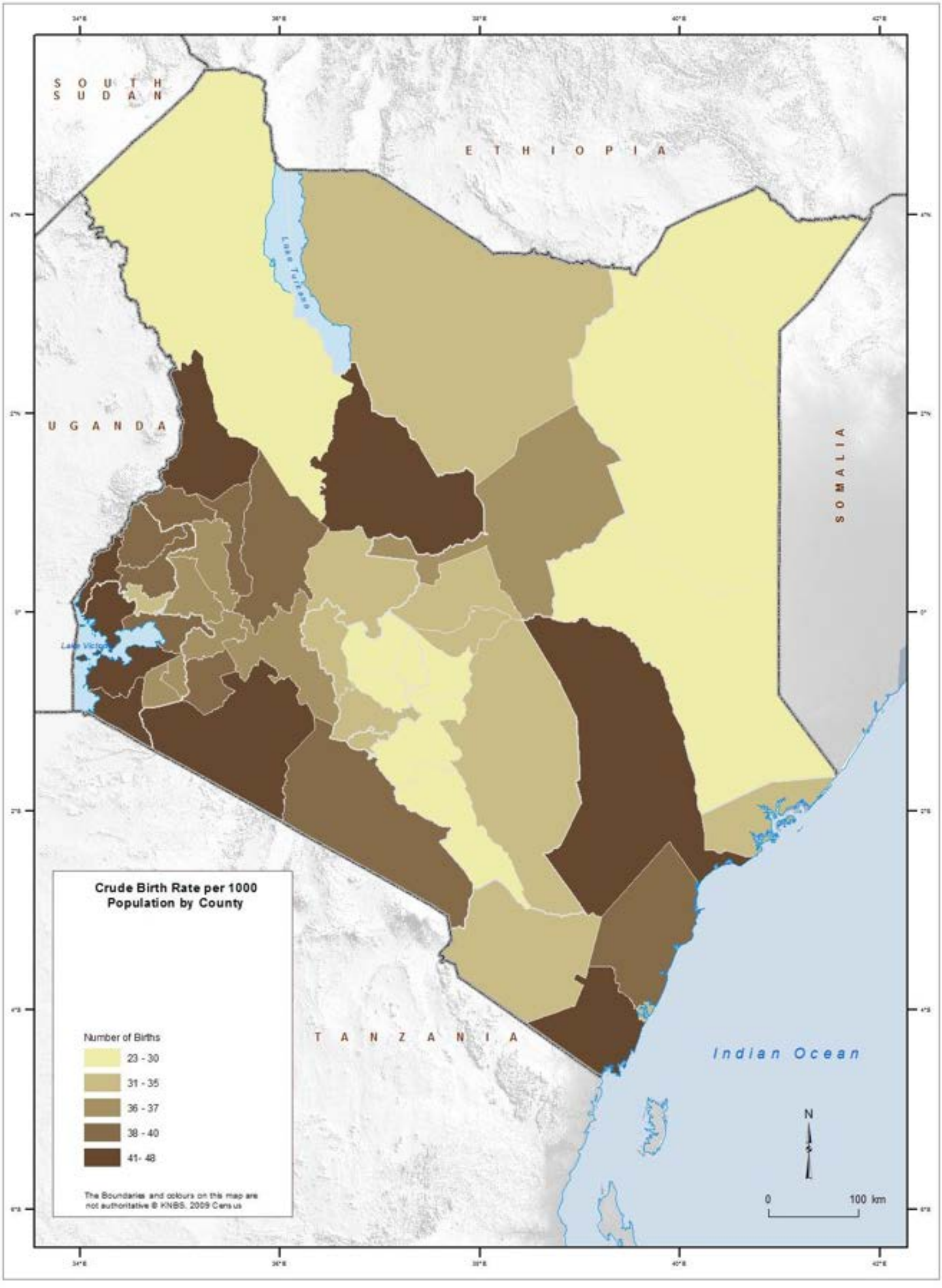
The 2009 Census data on fertility and nuptiality levels, trends and differentials, confirm that Kenya is on the path of fertility transition. This path of fertility decline has been dominated by women in urban centers and educated women whose age at first marriage increased significantly from 1989. Fertility and nuptiality behavior influence human wellbeing through direct and indirect impact on the development process. It is therefore important to collect accurate and reliable fertility and nuptiality data at the lowest units of development.

C.1: Crude Birth Rate by County

Crude birth rate (CBR) is defined as the total live births in a year per 1000 population. It is a crude measure of fertility because the denominator includes all ages and both sexes. It does not relate the births to the women at risk of child birth. It is calculated as follows: CBR is given by taking total live births in a year divide by Mid-year population and the product multiplied by 1000.

All the Counties in North Eastern Province, Turkana, Makueni, Machakos, Embu, Muranga and Nyeri Counties recorded the lowest CBR of between 23-30 births per 1000.The highest CBR was recorded in Tana River, Kwale, Samburu, Narok, Migori, Siaya and West Pokot counties of between 41-49 births per 1000. All the counties in Coast Province had a CBR of above 38 births per 1000 except Lamu County that ranged between 36-37 births per 1000 population. Vihiga County recorded an exceptionally low CBR of between 31-35 births per 1000 compared to the rest of the Counties in Naynza and Western Provinces. Map C.1 shows the spatial distribution of CBR by county in Kenya.

C.1: Crude Birth Rate by County



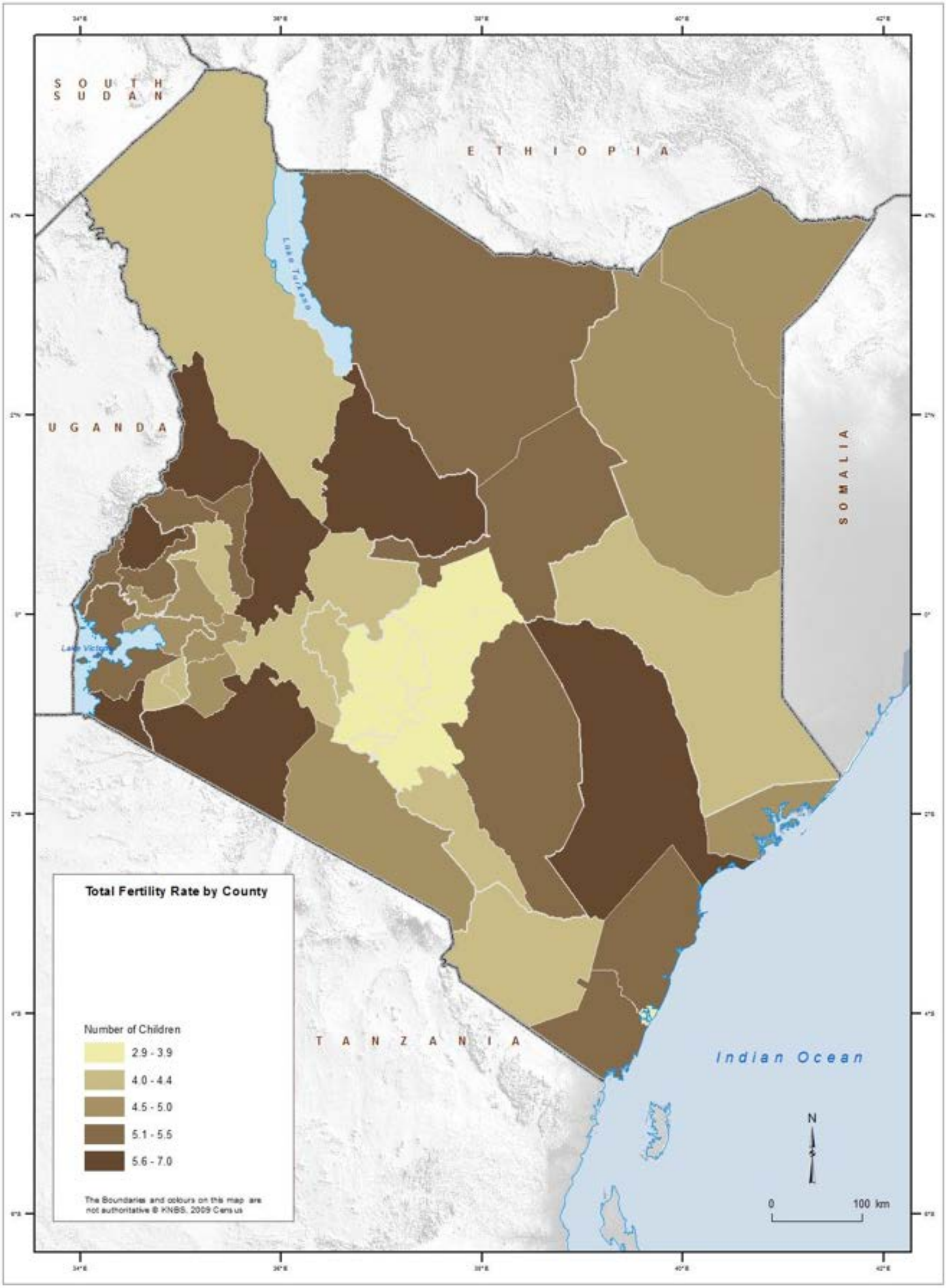
C.2: Total Fertility Rates by County

Total fertility rate (TFR) is defined as the number of children that a woman of hypothetical cohort would bear during her lifetime if she were to bear children throughout her life, at the rates specified by the schedule of age specific fertility rates for the particular year and if none of them dies before crossing the age of reproduction which is from age 15 to age 49 years. In Kenya, the reproductive ages have been expanded to capture adolescent fertility and are therefore 12-49 years.

Map C.2 show spatial distribution of TFR by County. Assessment of the counties' total fertility rates shows that all the counties in Coast Province had a TFR above 4.5, except Taita Taveta which had a TFR of between 4.0-4.4. Tana River had the highest TFR in Coast Province of between 5.6-7.0. Marsabit was the only county in Eastern Province which had a TFR of between, 5.6-7. Narok, Baringo, Samburu and West Pokot had the highest TFR in Rift Valley Province of between 5.6-7.0 while Turkana, Laikipia, Nakuru and Narumoru had the least TFR in Rift Valley of between 4.0-4.4.

Central Province counties and Nairobi had the least TFR of 2.9-3.9. Kisii, Nyamira and Uasin Gishu are the only Counties in Nyanza and Western Provinces with a TFR of below 4.4.

C.2: Total Fertility Rate by County



C.3: Singulate Mean Age at Marriage (SMAM)

Singulate Mean Age at Marriage (SMAM) is defined as the average age a woman or man lives in a single state before reaching age 50 years. It is therefore an estimate of the average age at first marriage in a population. The procedure for its calculation is very lengthy but can be obtained in any Demographic text book.

Female Singulate Mean Age at Marriage (SMAM) by County

In 2009 female SMAM for the country was 22.5 years. Rural areas SMAM was 21.9 years compared to relatively higher figure of 23.2 years in urban areas. A higher SMAM means a higher age at first marriage which could cause lower fertility assuming other factors are constant. The marriage pattern for females in Kenya is that, for pastoralist communities in arid and semi-arid areas, females tend to marry younger. In high potential agricultural areas and the major urban centres, females tend to marry at relatively higher.

In 2009 Turkana, Nairobi, Muranga, Nyeri and Uasin Gishu had the highest SMAM of 23 years and above while Tana River and Narok had the lowest female SMAM of less than 21 years. The rest of the counties had a female SMAM very close to the National Average.

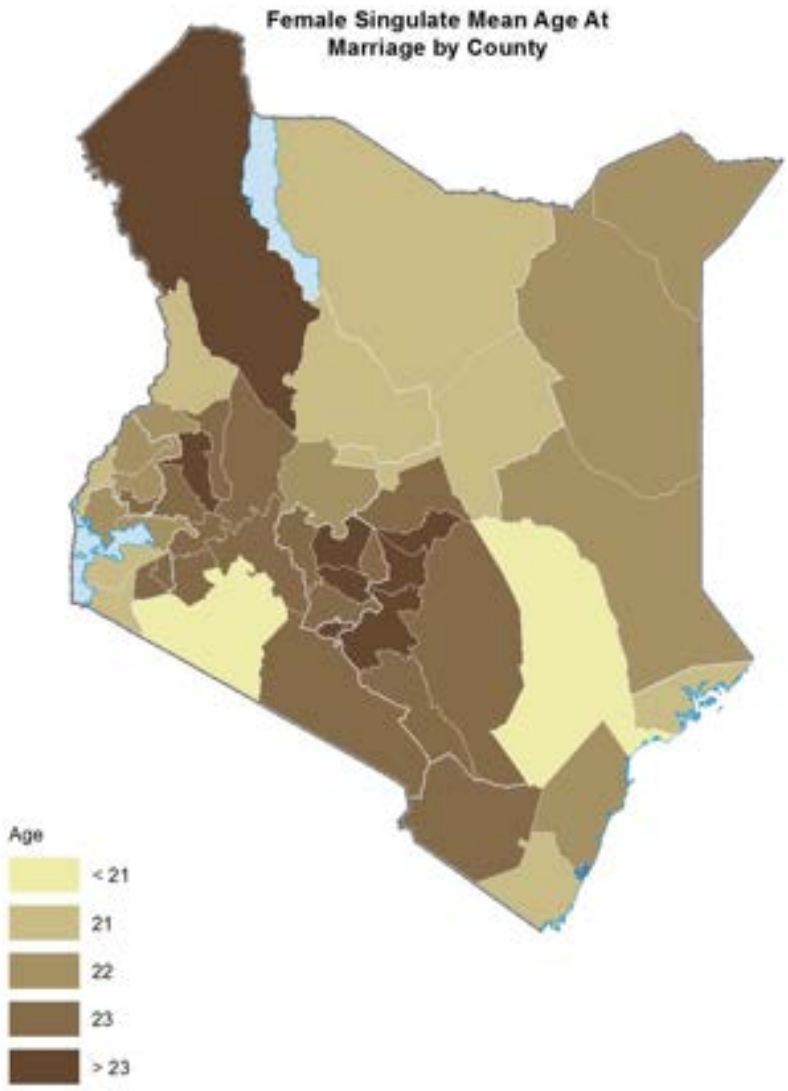
In summary, there seems to be an inverse association between SMAM and polygamy. Generally most counties which had low SMAM, especially among females, also had higher prevalence of polygamy, while counties with higher SMAM especially among women had very low proportions of women in polygamous unions. It should be noted that a large difference between male and female SMAM imply that women marry younger and men at a later age. Consequently such situations may mean that women enter into reproductive cohorts early and therefore have a longer period of child bearing.

Male Singulate Mean Age at Marriage (SMAM) by County

In 2009 the average male SMAM for the country was 26.7 years. Male SMAM in rural areas was 26.9 years and 26.5 years in urban areas. In fact the county pattern of male SMAM is similar to that of female population. Tana River, Narok, Migori, West Pokot and Busia counties registered the lowest male SMAM of less than 25 years. Turkana, Marsabit, Taita Taveta, Makueni, Machakos, Embu and Nyeri recorded the highest SMAM of above 29 for the males.. Spatial distribution of male SMAM is shown in map C3:B.

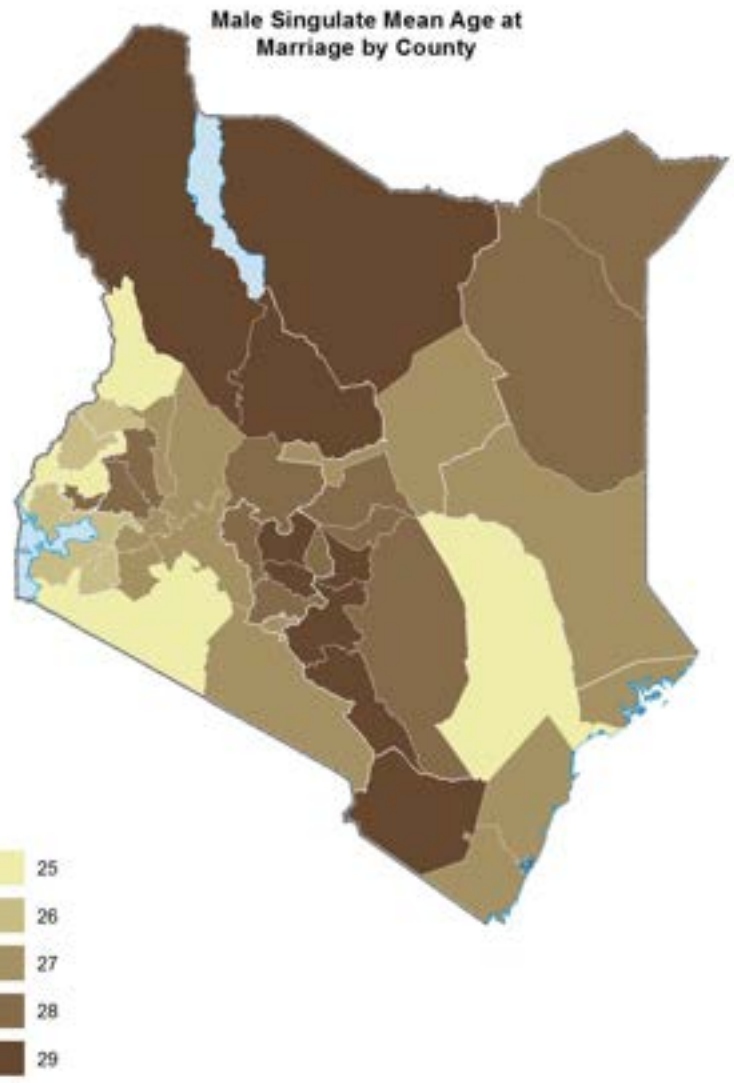
C.3. Singulate Mean Age at marriage

C.3: A



The boundaries and colours on the map are not authoritative ©KNBS, 2009 Census

C.3: B.



C.4: Nuptiality

Per cent by County of Females Never Married (Single)

A never married female or single female refers to any woman 12 years and above whom during the 2009 census, reported that she was neither legally, customarily nor religiously married. The per cent never married was therefore computed by taking the total number of all females 12 years and above in sub-location divide by the total number of all women 12 years and above in the same sub-location and multiplying the product by 100. It is noted in the map that 29 counties out of 47 counties (61.7 per cent) had proportions never married among females below the national average of 37.7 per cent. Most of these counties were in Western Kenya, Coast and Rift Valley. The counties with very low proportions of females never married included, Tana River, Siaya, Migori, Homa Bay, Narok, Kirinyaga, Lamu ,Kwale, Isiolo and Busia of less than 34 per cent. All these counties were characterized by high rates of polygamy and low school enrolment for females. It is evident again that counties in the dry lands, high potential regions and the major urban centres dominate the list of counties with very high proportion of never married females. These included, Turkana, Nairobi, Uasin Gishu , Mandera , Nandi , Baringo, Elgeyo Marakwet, Kericho, Kiambu, Wajir , Kitui , Kisii , and Mombasa of more than 40 per cent. Spatial distribution of females never married is in map C.4: A.

Per cent by County of Males Never Married (Single)

The definition and calculation of percent of never married males 12 years and above is the same as that of females. Kajiado, Nairobi, Kirinyaga, Meru, Tana River, Lamu and Nyamira had proportions of never married men between 41-47 per cent. All the North Eastern counties, Makueni, Marsabit, Samburu, Baringo, Turkana, and Kisii had high proportions of never married men between 56-63per cent. In summary counties with very high percentage of never married males also had very high Singulate Mean Age at First Marriage (SMAM). Map C.4: B shows the distribution of Never Married Males by County.

Per cent by County of Females in Monogamous Unions

The per cent of females in monogamous unions in 2009 in every county was calculated as follows: the total number of women 12 years and above married in monogamous union is divided by the total number of all women aged 12 years and above in the county and the product is multiplied by 100.

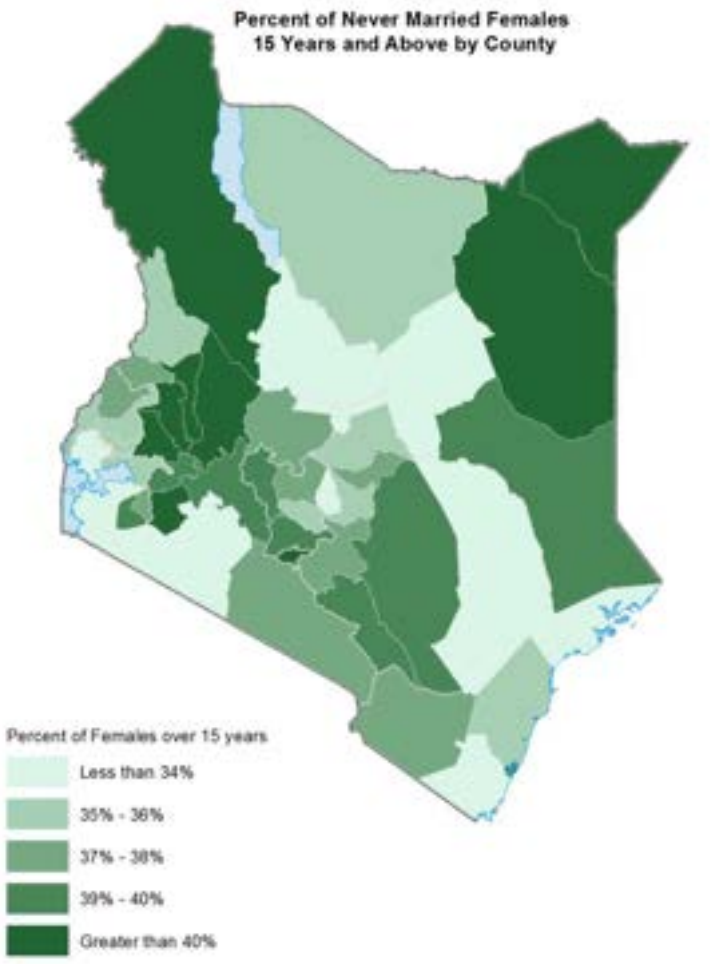
It is shown that the dry lands of Kenya, which cover nearly two-thirds of the country and has about 30 per cent of the population, are regions of very high female marriage due to cultural norms and practices affect such as child betrothal, female genital mutilation and bride price. Lamu, machakos, Meru, Tharaka, Nyamira and Trans Nzoia counties recorded high proportions of females in monogamous unions of between 60-63 per cent. Very low proportions of female in monogamous unions of between 33-42 per cent, were recorded in Mandera, Narok, Migori, Homa Bay, Siaya, West Pokot, Turkana and Samburu counties. Map C.4: C depicts spatial distribution of female s in monogamous union.

Per cent by County of Males in Monogamous Unions

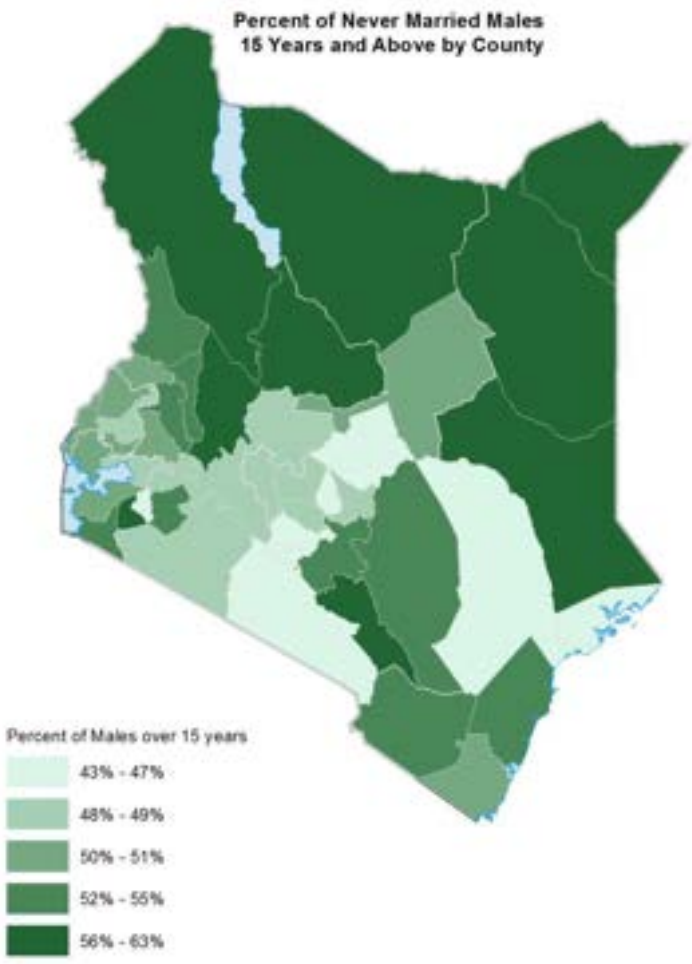
The per cent of males in monogamous unions at county level in 2009 was calculated as that of females. Counties with very low percentage of men married in monogamous unions were; Kitui , Marsabit, ,Migori , Garissa , Wajir, Baringo , West Pokot , Samburu and Turkana of between 27-39. Conclusively, these were also counties with very high proportion of male polygyny. Counties with very high percentage of men in monogamous union were, Nairobi, Kirinyaga, Kiambu and Lamu of between47-54 per cent. Map C.4: D shows distribution of per cent of Men in Monogamous Unions.

C.4 Marital Status of the population

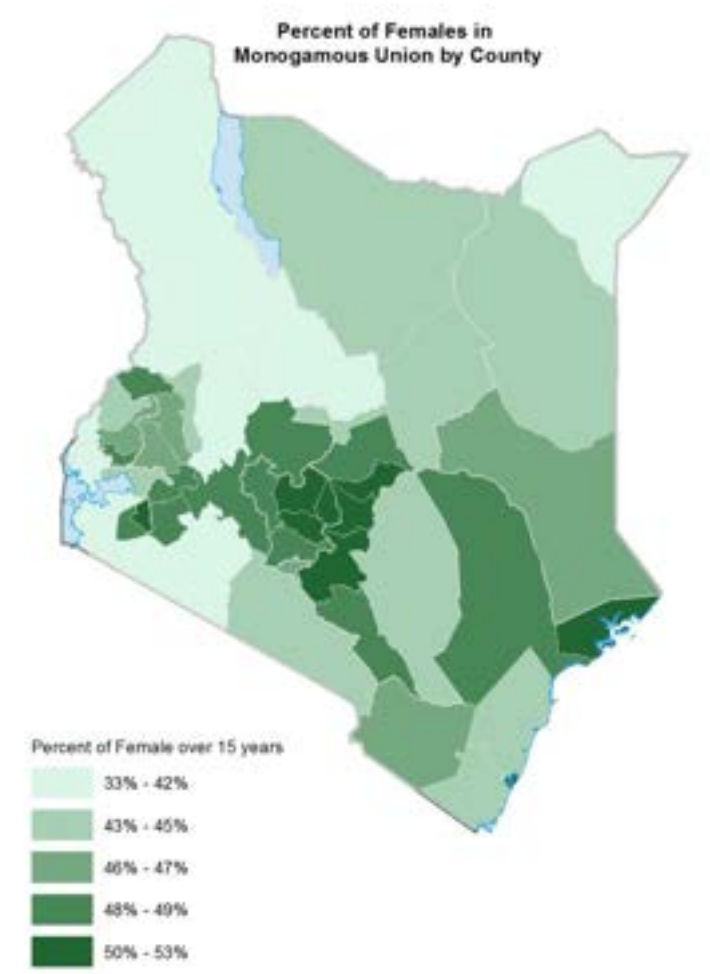
C.4: A.



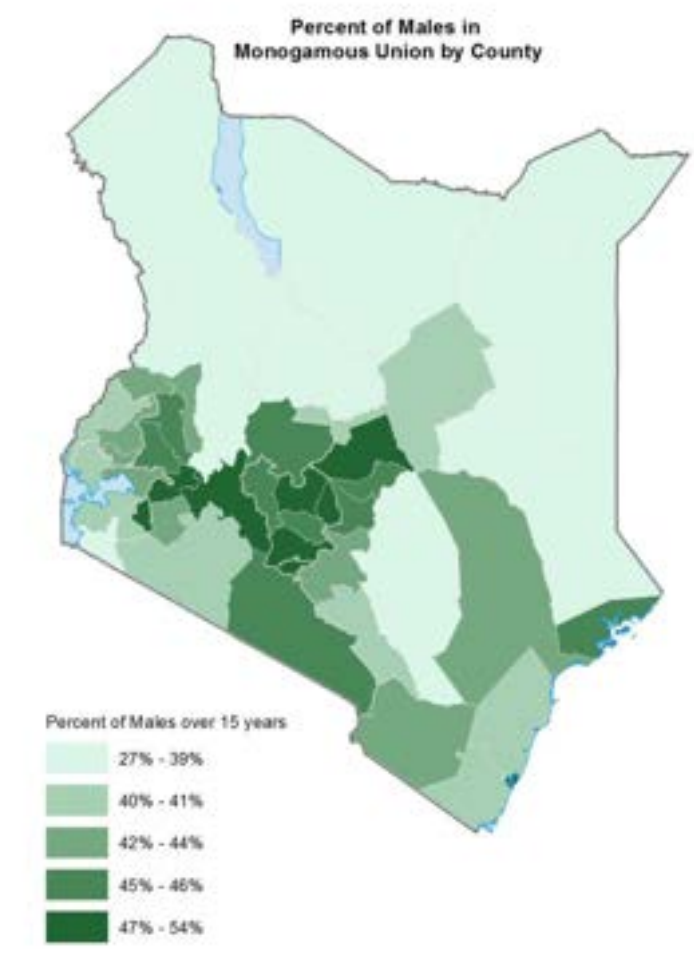
C.4: B.



C.4: C.



C.4: D.



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Per cent of Females in Polygamous Unions by County

The per cent of females in polygamous union in 2009 in every county was calculated as follows: the total number of women 12 years and above married in polygamous union is divided by the total number of all women aged 12 years and above in the county and the product is multiplied by 100. It is noted that Taita Taveta, MAchakos, Nairobi,Embu, Tharaka, Vihiga, Nyeri, Nyandarua,and Nakuru counties had the lowest proportion of females in polygamous unions of less than 4 per cent. Narok, Smburu West Pokot and Homa Bay counties had the highest proportion of females in polygamous unions greater than 23 per cent. Most of the ASAL counties recorded a relatively high proporitions of females in polygamous unions compared to the rest of the counties.

Per cent of Males in Polygamous Unions by County

The 2009 census reveals that the average proportion for males 12 years and above in polygynous union for the country was 4.2 per cent. West Pokot, Samburu, Narok, Migori, Homa Bay, Tana River, Mandera, and Tuarkana counties recorded the highest proportions of males in polygamous unions ranging between 7.4-12.1 per cent. The counties with the least proportion of males in polygamous unions included Taita Taveta, MAchakos, Nairobi,Embu, Tharaka, Vihiga, Nyeri, and Nyandarua ranging between 1..2-2.2 per cent. In a nutshell the spatial distribution of males in polygyny is similar to that of females in polygamous unions.

Percent of Widowed by County

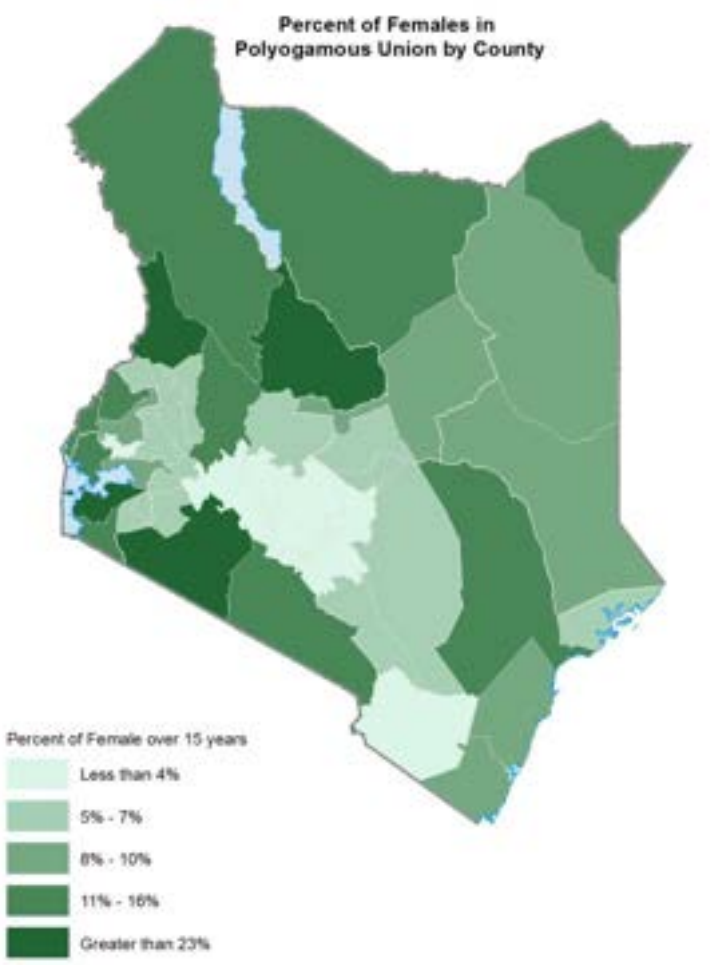
The calculation of percent of females aged 12 years and above who were widowed during the 2009 Census is done as follows: the total number of women 12 years and above widowed in a county is divided by the total number of all women aged 12 years and above in the county and the product is multiplied by 100. Garrisa, Wajir, Mandera, Kajiado,Narok, West Pokot and Uasin Gishu counties recorded the lowest proportions of widowed females of between 3-4 per cent. The highest proportions of widowed females were recorded in Taita Taveta, Migori and Siaya counties of between 12-15 percent. A good proportion of Nyanza and Eastern Provinces had proportions of widowed females above 7 per cent..

Percent by County of Widowed Males

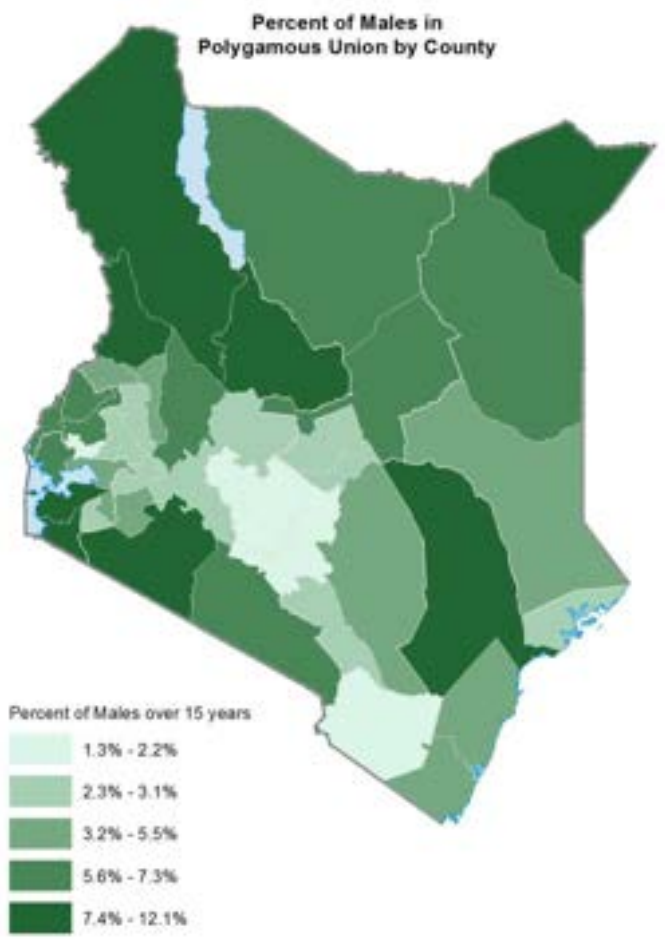
The lowest proportions of widowed males were recorded in Turkana, West Pokot, Bungoma, Samburu, Isiolo, Marsabit, Mandera, Narok , Bomet and Kajiado counties All these counties apart from Bungoma fall under the ASAL counties. The highest proportions of widowed males were recorded in Taita Taveta, Makueni, Kisii, Kisumu, Siaya, Vihiga, Muranga, Nyeri and Tharaka counties ranging between 1.4-2.4 per cent. Coast, Central Nyanza and Southern part of Eastern Province recorded high levels of widowed males.

C.4. Marital Status of the population

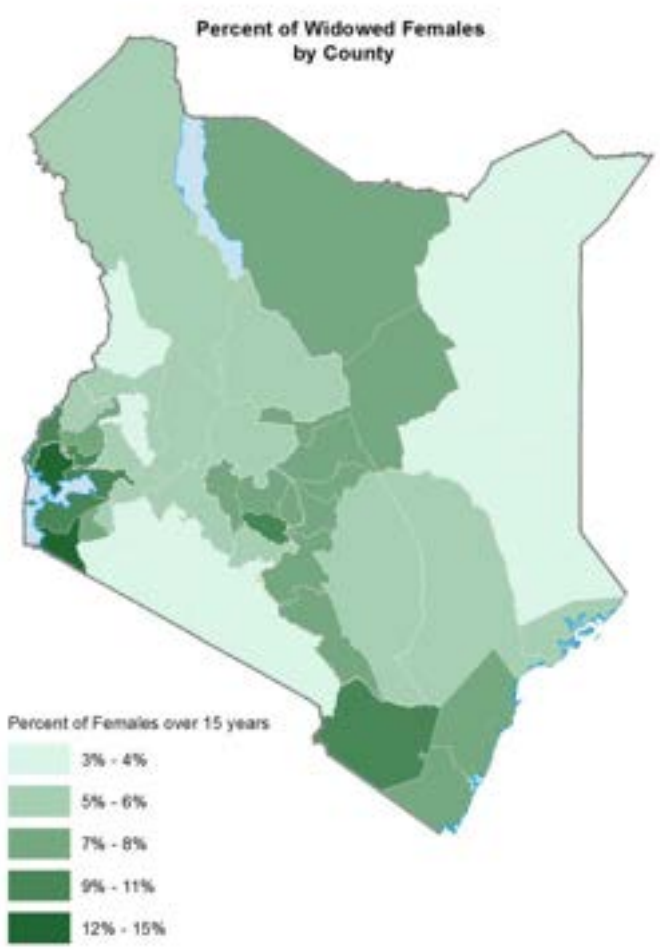
C.4: F.



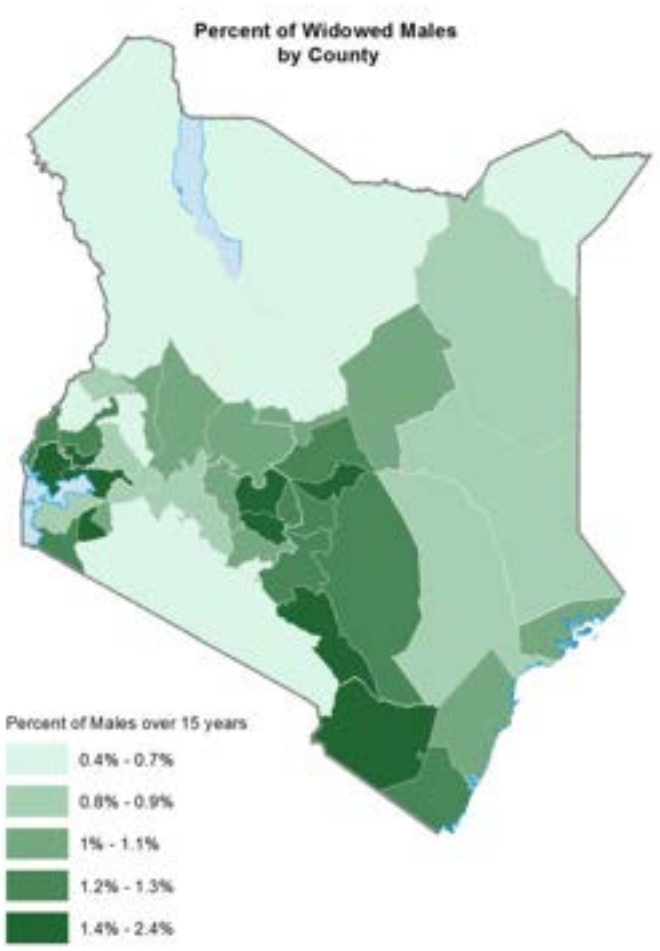
C.4: G.



C.4: H.



C.4: I.



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Percent by County of Females Divorced or Separated

Divorce is an act or instance of legally dissolving a marriage. Unlike divorce, separation in marriage is not a complete break of the legal union of marriage. Spouses live independent lives, and in many cases in different locations during the whole period of separation. Unlike in divorce, the separated spouses are still legally married and may re-unite if they so wish. Some African communities who cherish customary marriage do not accept divorce even when cultural conditions for divorce have been fulfilled. Hence collecting data on divorce is sometimes challenging. Census data is based on respondents' verbal account on divorce because documentary proof is not demanded.

In 2009 the National average for women 12 years and above who were divorced or separated was 3.0 per cent. The proportion of divorced females in rural the areas was 2.6 per cent compared to 3.7 per cent in urban area. Narok, Migori, Nyamira, Homa Bay, Kericho, Nandi, Siaya, Samburu and West Pokot had very low proportions of females divorced or separated between 0.8-109 per cent. Kwale, Lamu, Taita Taveta, Meru, Kirinyaga, Embu, Kiambu, Nyandarua and Trans nzoia had high proportions of females divorced or separated of between 4.3-7.0 per cent.

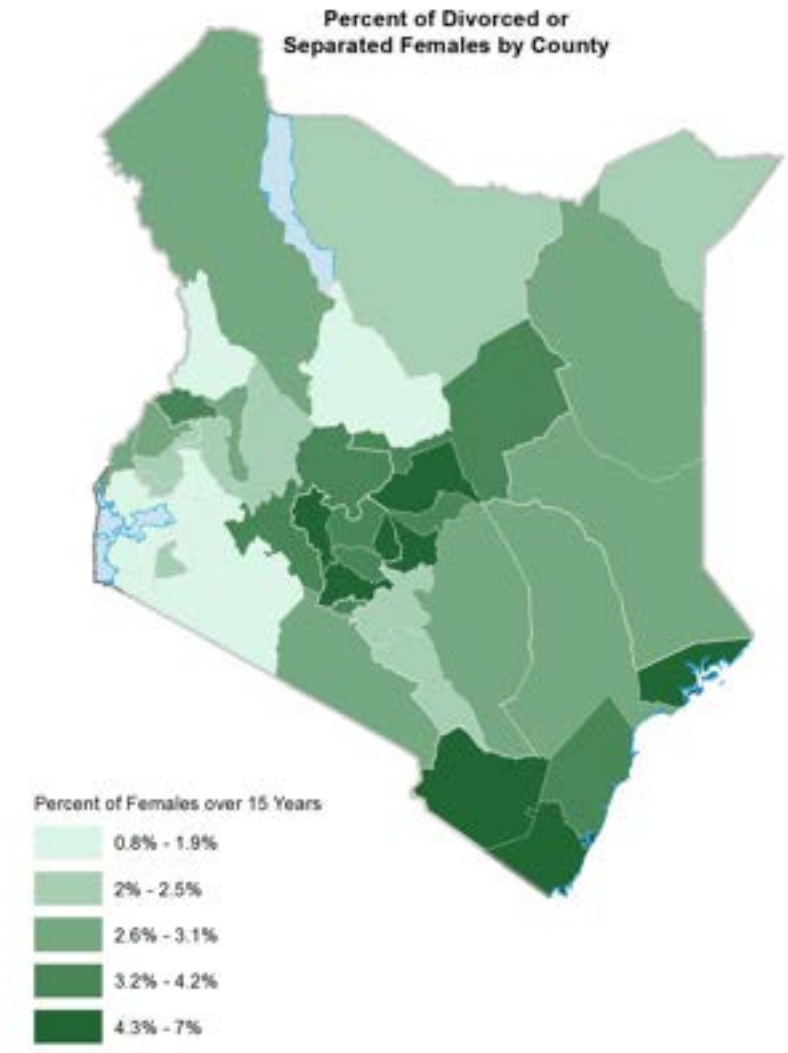
Percent by County of Males Divorced or Separated

The spatial pattern in proportions of divorced and separated men is similar to that of women and the proportions were relatively low throughout the country. In 2009 the proportion of males aged 12 years and above who were divorced and separated was 1.6 percent for the country. The proportion of divorced and separated men was also higher in rural areas, 1.7 percent, than in urban areas, 1.4 percent.

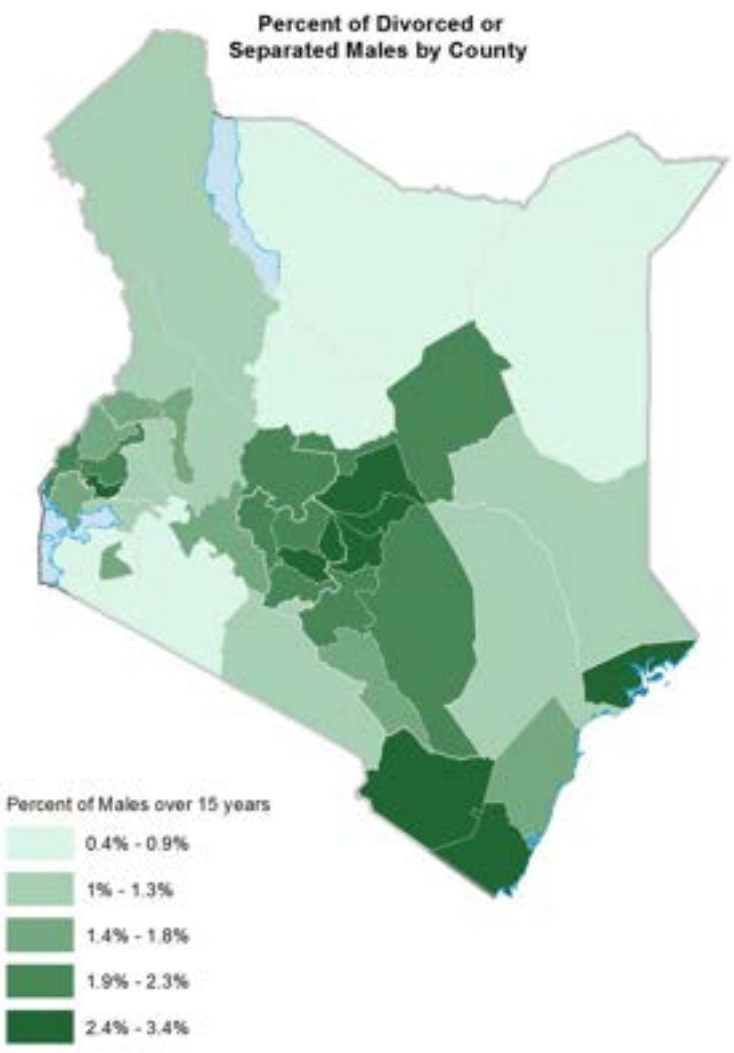
The provincial proportions for 2009 of divorced and separated men were very low ranging between 1.0 percent in Nyanza Province to 2.4 percent in Central Province. At the county level, the counties that recorded high proportions of males divorced or separated included, Lamu, Kwale, Taita Taveta, Meru, Tharaka, Kirinyaga and Vihiga, of between 2.4-3.4 per cent. The lowest proportions of males divorced or separated were in Mandera, Wajir, Marsabit, Samburu, Narok, Migori, Homa Bay and Kericho ranging between 0.4-0.9 per cent.

C.4. Marital Status of the population

C.4: J.



C.4: K.



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The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

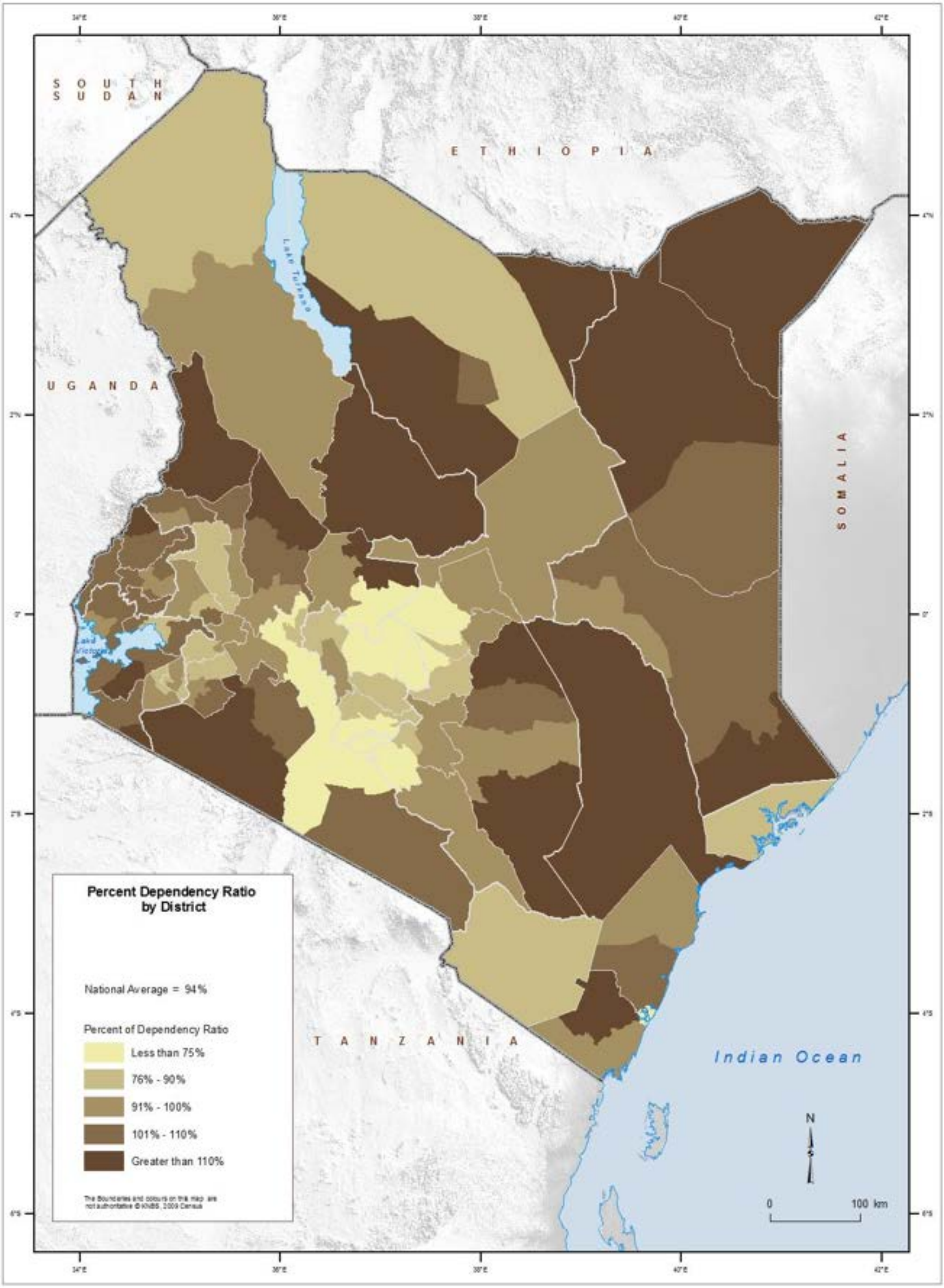
C.5: Dependency Ratios by County

Dependency Ratio is a measure showing the number of dependants (aged 0-14 and over the age of 65) to the total population (aged 15-64). It is a measure of relative burden of persons in the dependent ages in relation to those in the productive ages in a community. Dependency Ratio (DR)= total children 0-14 years plus old age population 65 years and above divide by the total population 15-64 years and the product multiplied by 100. Any value above 100 indicates the weight of dependency per 100 active population. Any value lesser than 100 indicates less burden to the working population. It is thus a proxy measure of the level of poverty in a population. The index can be computed by sex and age. Map C.5 is a general one in which there is no disaggregation by sex.

It is observed that dependency is greater in rural areas with a ratio of 100.4 compared with urban dependency of 62.7. At the provincial level, North Eastern is leading followed by Western Province and Nyanza. Nairobi has the lowest dependency ratio of 46.1. High economic dependency leads to poverty which is strongly correlated with high fertility.

The spatial pattern of dependency ratios at district level shows that counties in arid and semi-arid regions have very high dependency ratios above 100 per cent. The counties in the Lake Victoria Basin also have very high dependency ratios. Otherwise, it is shown that very few districts have low dependency of less than 70 per cent. These districts are: Nyeri, Kirinyaga, Kiambu, Thika and Nairobi.

C.5: Dependency Ratio by District



Section D: Mortality

Background

This section of the Atlas presents findings on levels and patterns of mortality. The measures of mortality illustrated in this Atlas are childhood (Infant and under-5), maternal and adult.

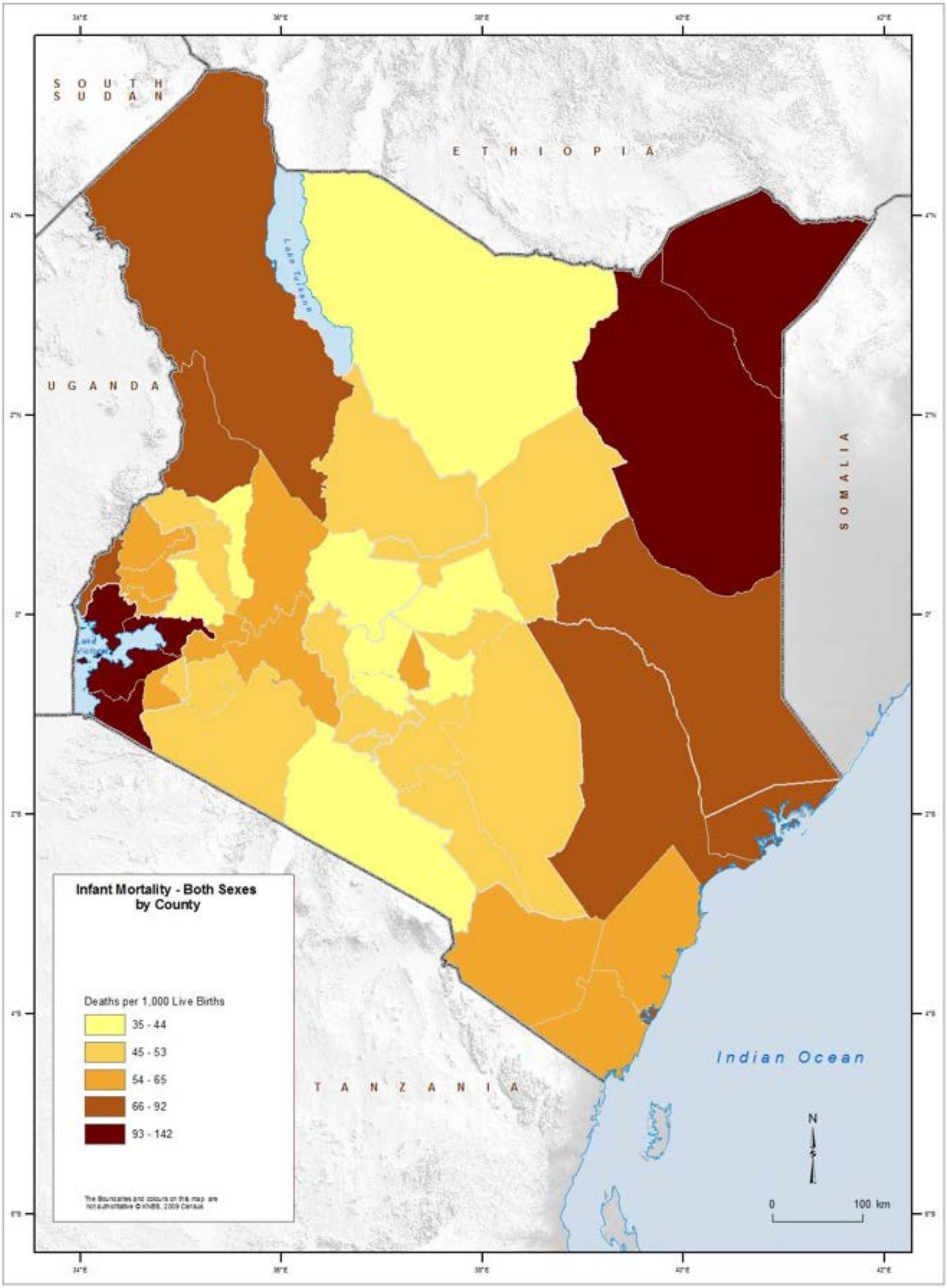
D.1: Childhood Mortality

Childhood mortality is used as an indicator for social wellbeing. Infant mortality rate (IMR) and under-five mortality (U5M) are some of the clearest indicators of the socio-economic and health status of a community. This is because, more than any other age-group of a population, infant survival depends on the socio-economic conditions of their environment. Kenya's target on 4th Millennium Development goal is to reduce to 33 per 1000 by 2015 the number of children dying before attaining age five/before their fifth birthday. According to findings from this census, U5M rate is 79 per 1,000. This is a decline from 116 per 1,000 recorded in the 1999 census.

Two Components of Childhood Mortality (Infant and Under Five Mortality)

The maps in this section show IMR (number of children dying before their first birthday for every 1,000 children born) and U5M (number of children dying before reaching age five, for every 1000 children born) by sex and county. The maps describe childhood mortality patterns based on direct estimates from deaths in the household in the 12 months prior to the 2009 census. The estimates relate to the births in the year 2005. The lowest Infant Mortality rates (IMR) were recorded in Marsabit, Kajiado, Nandi, Elgeyo Marakwet, Muranga Embu, Meru and Laikipia counties ranging between 35-44 deaths per 1000 live births. The highest IMR were recorded in Mandera, Wajir, Migori, Homa Bay, Kisumu, and Siaya counties ranging from 93-142 deaths per 1000 live births.

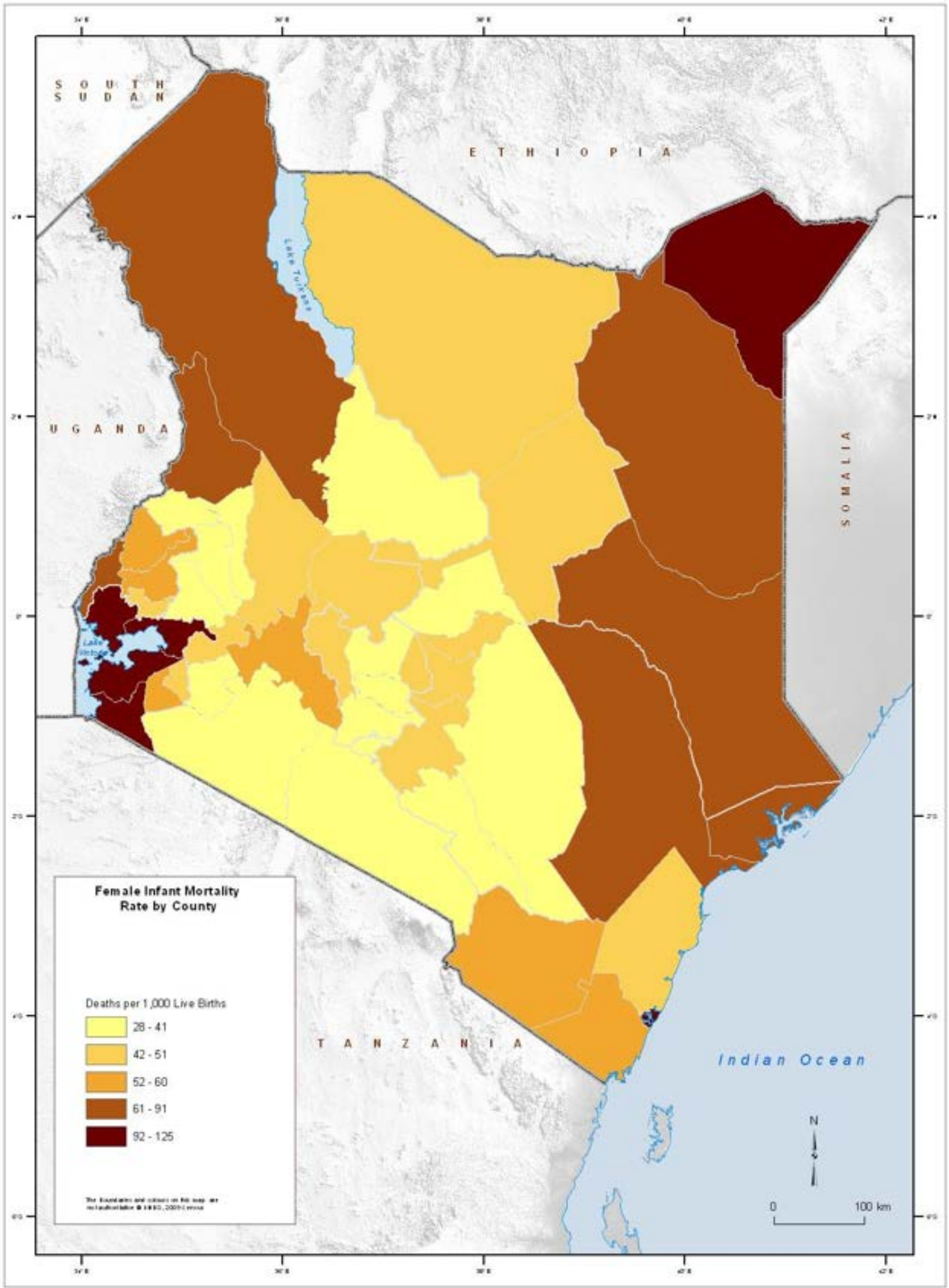
D.1: Infant Mortality Rate ~ Both Sexes by County



D.2: Female Infant Mortality Rate

Map D.2 indicates that 36 per cent of the counties had female infant mortality rates of 25 to 41. These include, Nairobi, Nyeri, Kiambu, Meru, Kitui, Makueni, Samburu, Trans Nzoia, Uasin Gishu,Elgeyo Marakwet,Nandi, Narok, Kajiado and Bomet. Twenty seven (27) per cent of the counties experienced infant mortality rates of between 42 and 51. Nyandarua, Kirinyaga, Kilifi, Marsabit, Isiolo, Tharaka, Embu, Machakos, Nyamira, Baringo, Laikipia, Kericho and Vihiga fall in this category. Five counties or 11per cent had infant mortality rates of between 52 and 60. These are Kwale, Taita Taveta, Nakuru, Kakmega and Bungoma. Tana River, Lamu, Garissa, Wajir, Turkana, West Pokot and Busia experienced infant mortality rates between 61 and 91, which accounts for 15 per cent of the counties.

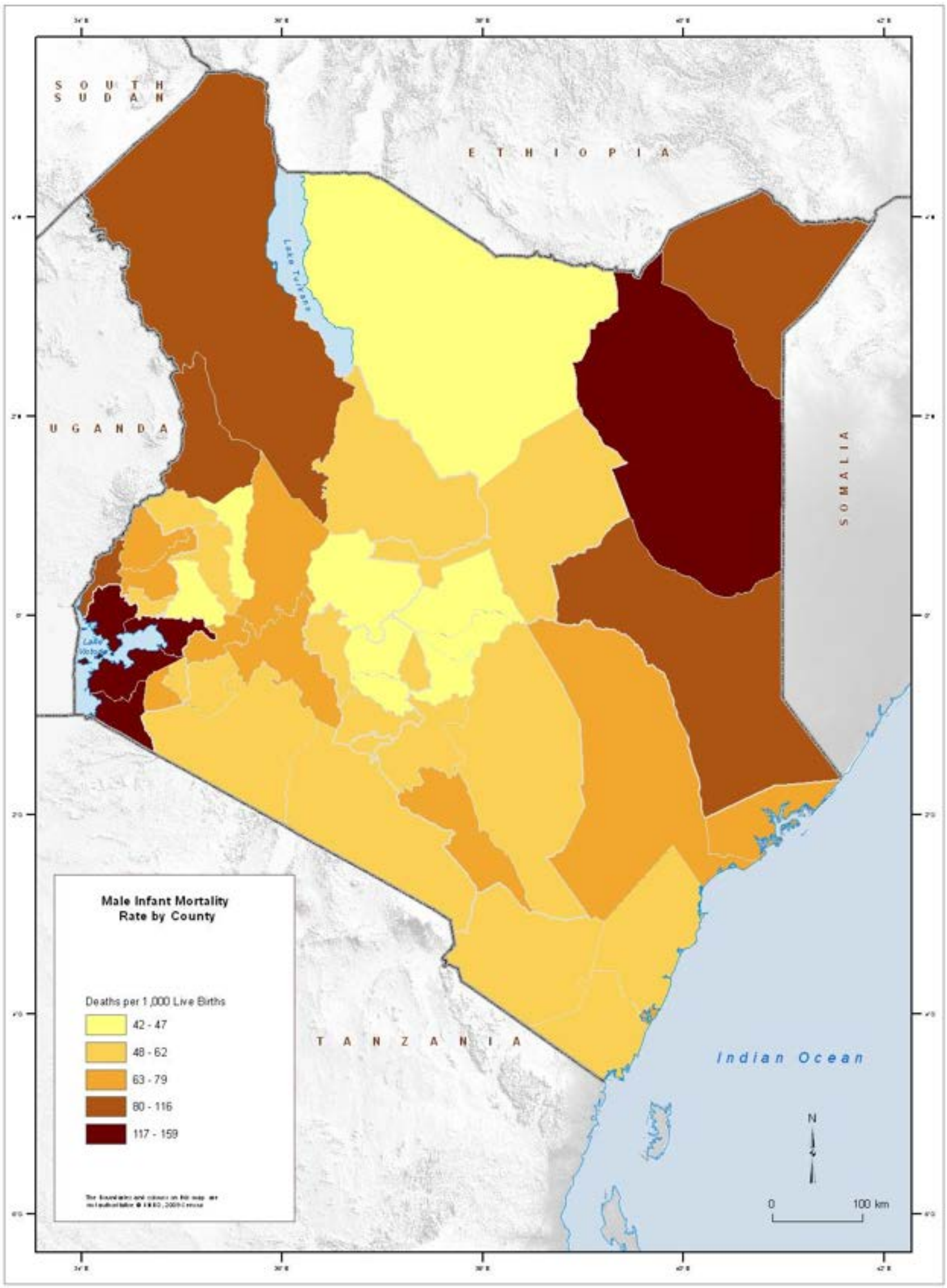
D.2: Female Infant Mortality Rate



D.3: Male Infant Mortality Rate

Map D.3 indicates that 19 per cent of the counties experienced male infant mortality rates of between 42 and 47 per 1000 live births. Nairobi, Murang'a, Marsabit, Meru, Tharaka, Embu, Elgeyo Marakwet, Nandi and Laikipia fall in this category. The majority of the counties 45 per cent experienced infant mortality levels of between 48 and 62. Among these are Nairobi, Nyandarua, Kirinyaga, Kiambu, Kwale, Kilifi, Taita Taveta, Isiolo, Kitui, Machakos, Nyamira, Samburu, Trans Nzoia, Uasin Gishu, Narok, Kajiado, Bomet and Vihiga. While 21per cent experienced infant mortality levels of between 63 and 79. These include Mombasa, Tana River, Lamu, Makueni, Kisii, Baringo, Nakuru, Kericho, Kakamega and Bungoma. Five counties, Garissa, Mandera, Turkana, West Pokot and Busia had infant mortality of between 80 and 116, which accounts for 10 per cent. Wajir, Siaya, Kisumu, Migori and Homa Bay are a few of the 11 per cent with an IMR of between 117 and 159.

D.3: Male Infant Mortality Rate

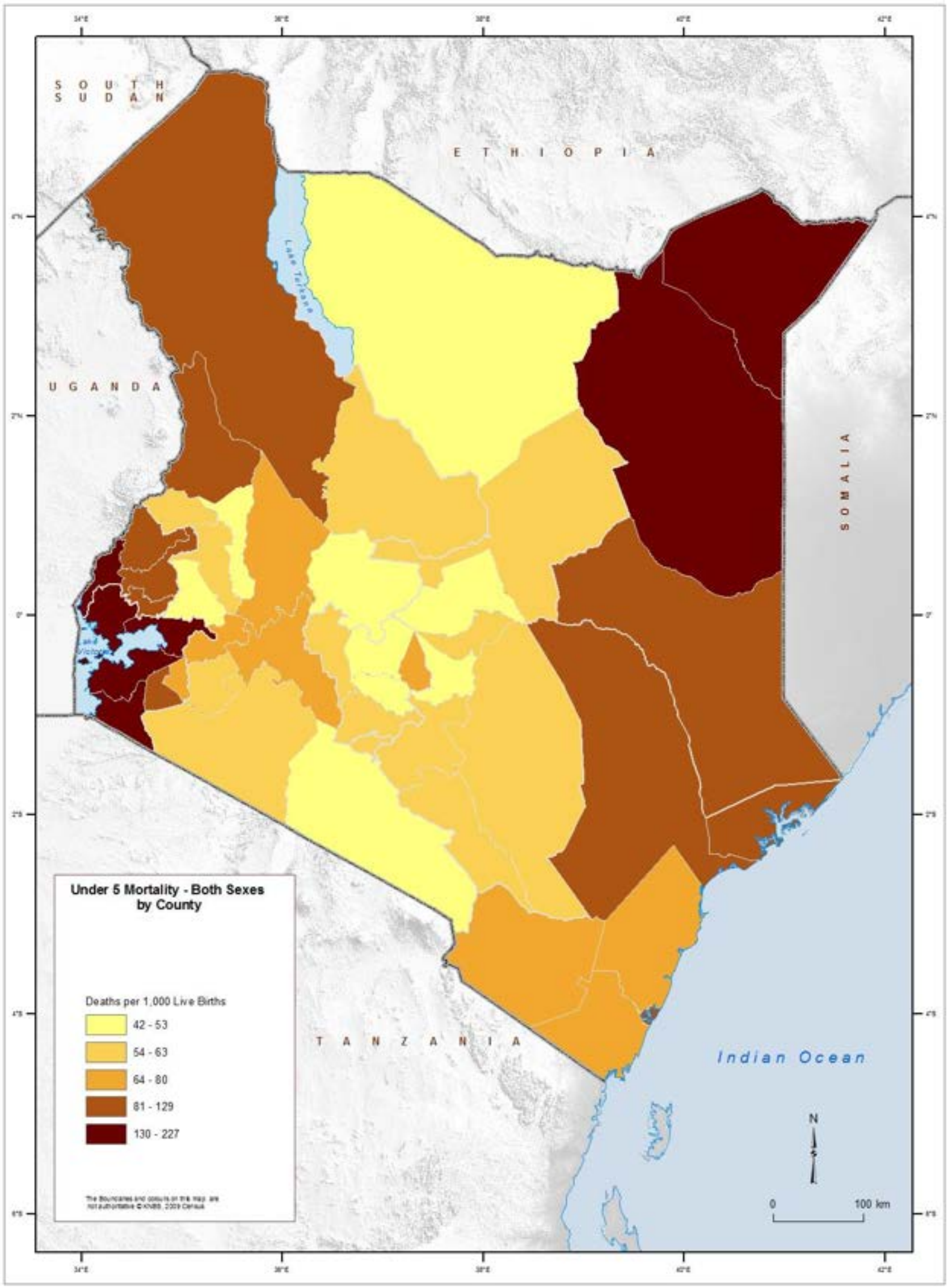


D.4: Under Five Mortality – Both Sexes

The under five mortality followed a similar regional differential as the Infant mortality rates for both sexes, with all the Nyanza Counties apart from Kisii and Nyamira Counties, Busia County, Mandera and Wajir Couties in North Eastern Province, recording the highest under five mortality rate of between 130-227 deaths per 1000 live births.

Kajiado, Marsabit, Nandi and Elgeyo Marakwet again joined the Central Province Counties in recording the lowest rates of under-five mortality of 42-53 deaths per 1000 live births. Bungoma, Kakamega,Vihiga,Kisii, Tana River, Lamu, Garrisa, West Pokot and Turkana counties recorded high levels of Under-five mortality rates of between 130-227 deaths per 1000 live births. This spatial distribution is as represented in D.4

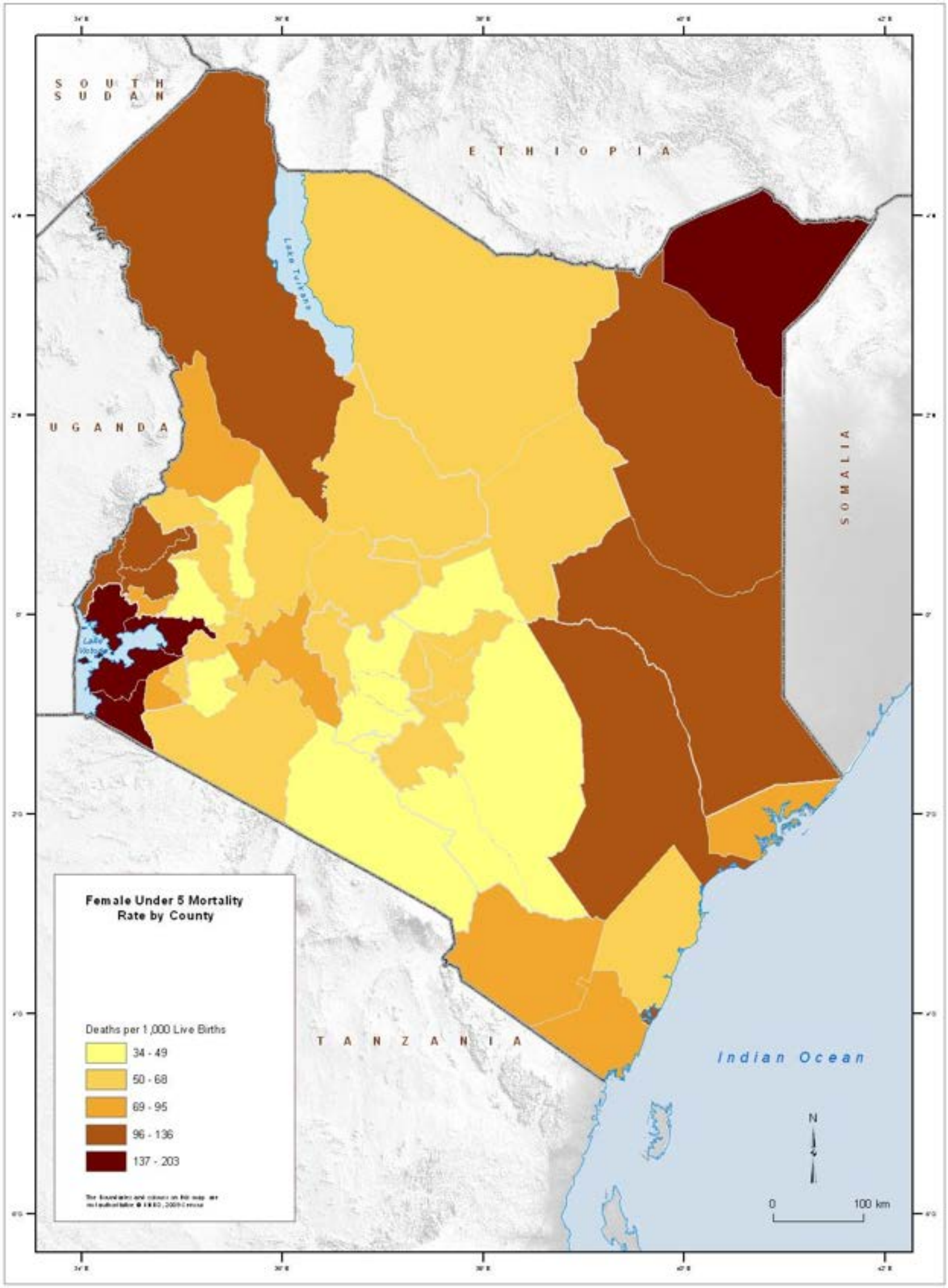
D.4: Under Five Mortality – Both Sexes



D.5: Female Under-Five Mortality

Under-five mortality values for females by Counties are shown in map D.5 and range from 34 to 203 with Siaya and Mandera Counties having the highest under five female mortality rates of between 137-203 deaths per 1000 live births. Kajiado, Makueni, Kitui, Meru, Nyeri, Muranga, Kiambu, Bomet, Nandi and Elgeyo Marakwet recorded th least under five mortality for the females of between 34-39 deaths per 1000 live births. Kwale, Lamu, Taita Taveta, Kisii, West Pokot, Nakuru and Vihiga experienced Under-five Mortality of between 69 and 95 deaths per 1000 live births, i.e. 15 per cent of the counties. Counties such as Mombasa, Tana River, Garissa, Wajir, Turkana, Kakamega, and Bungoma experienced under-five mortality of 96 to 136 deaths per 1000 live births among the females. Eleven (11) per cent of the counties had under-five mortality of between 137 and 205 deaths, these included Mandera, Siaya, Kisumu, Migori and Homa Bay.

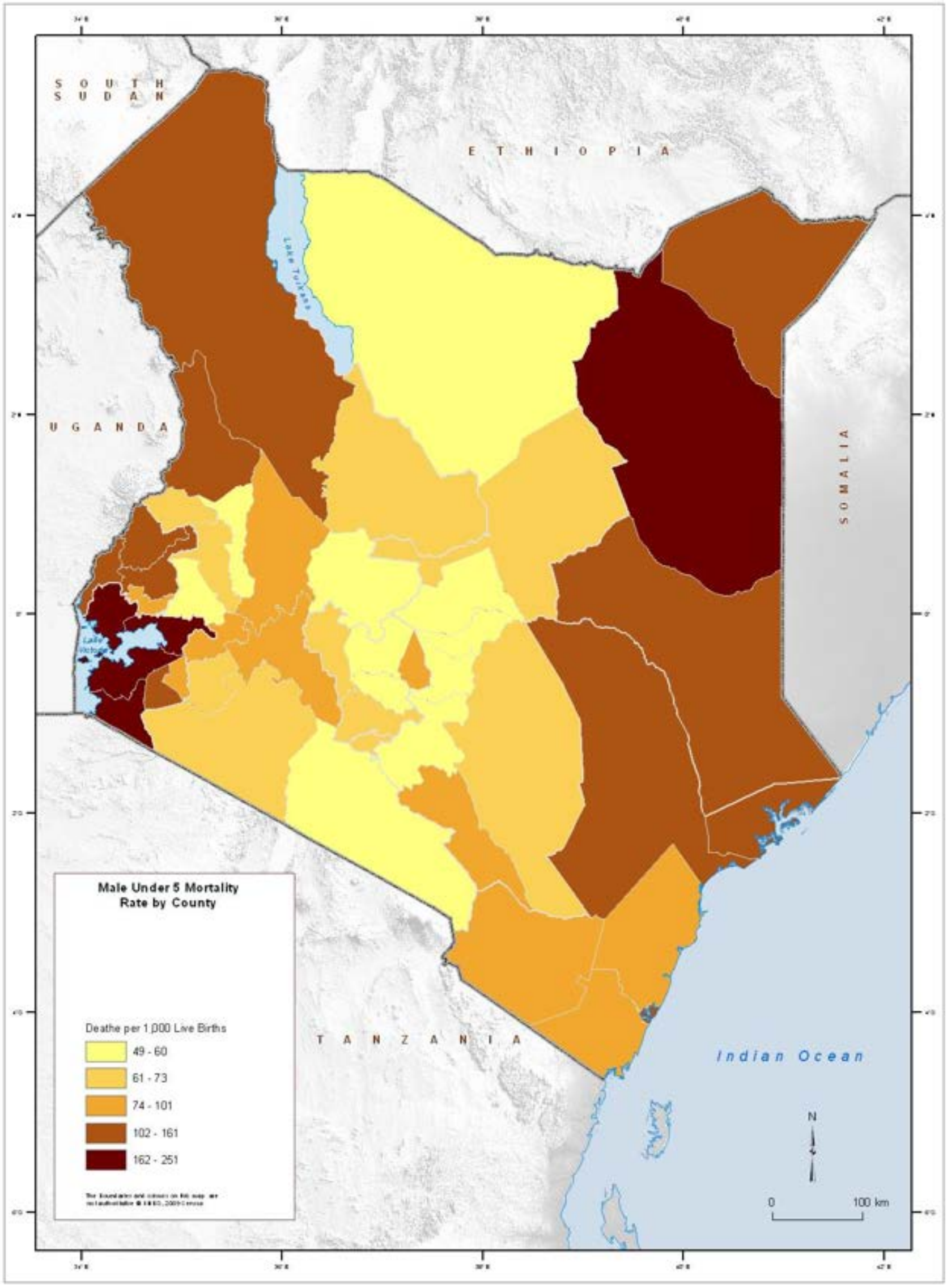
D.5: Female Under Five Mortality Rate



D.6: Male Under-Five Mortality Rate

Map D.6, shows that all the Counties in Nyanza Province and Wajir County recorded the highest under five mortality for the males, of between 162-251 deaths per 1000 live births before attaining five years of age. This rate is higher than the highest under five mortality rate for the females. Marsabit, Kajiado, Nandi, Elgeyo Marakwet, Machakos and all the counties in Central Province apart from Kiambu and Kirinyaga recorded the lowest under five mortality for the males ranging between 49-60 deaths per 1000 live births.

D.6: Male Under Five Mortality Rate



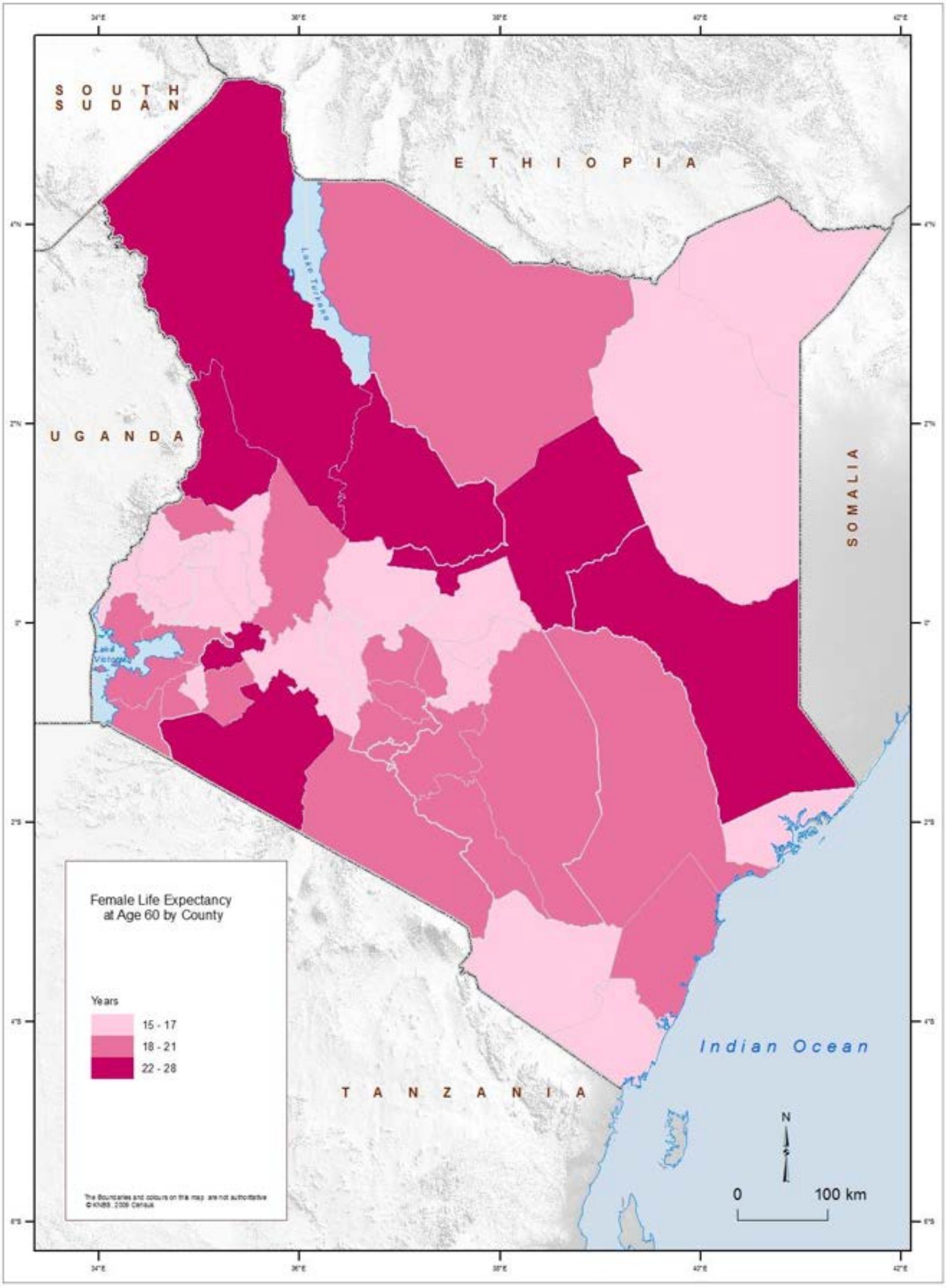
D.7: Life Expectancy

Life expectancy refers to the age until which a person is expected to live or the remaining number of years of life an individual is expected to live if prevailing mortality conditions prevail. Life expectancy can be calculated at birth or at some other age and generally varies according to age. In this atlas the maps present life expectancy at age 60 i.e. the number of years an individual is expected to live after attaining age 60. They are calculated separately for males and females. There are great variations in life expectancy between different regions in Kenya caused by differences in factors like public health, available medical care, diseases such AIDS, Malaria etc.

Female Life Expectancy at Age 60

The number of years women aged 60 are expected to live varies from 15 to 28 as shown in Map D.7. Most of the counties that recorded high female life expectancy at age 60 were the Arid and Semi- arid counties including Garrisa, Isiolo, Samburu, West Pokot, Turkana, Narok and Kericho counties. Among the counties with least life expectancy at age 60 included; Kwale, Taita Taveta, Wajir, Mandera, Nyamira, Embu, Tharaka, Meru, Laikipia, Nyandarua and Nakuru counties ranging between 15-17 years after age 60.

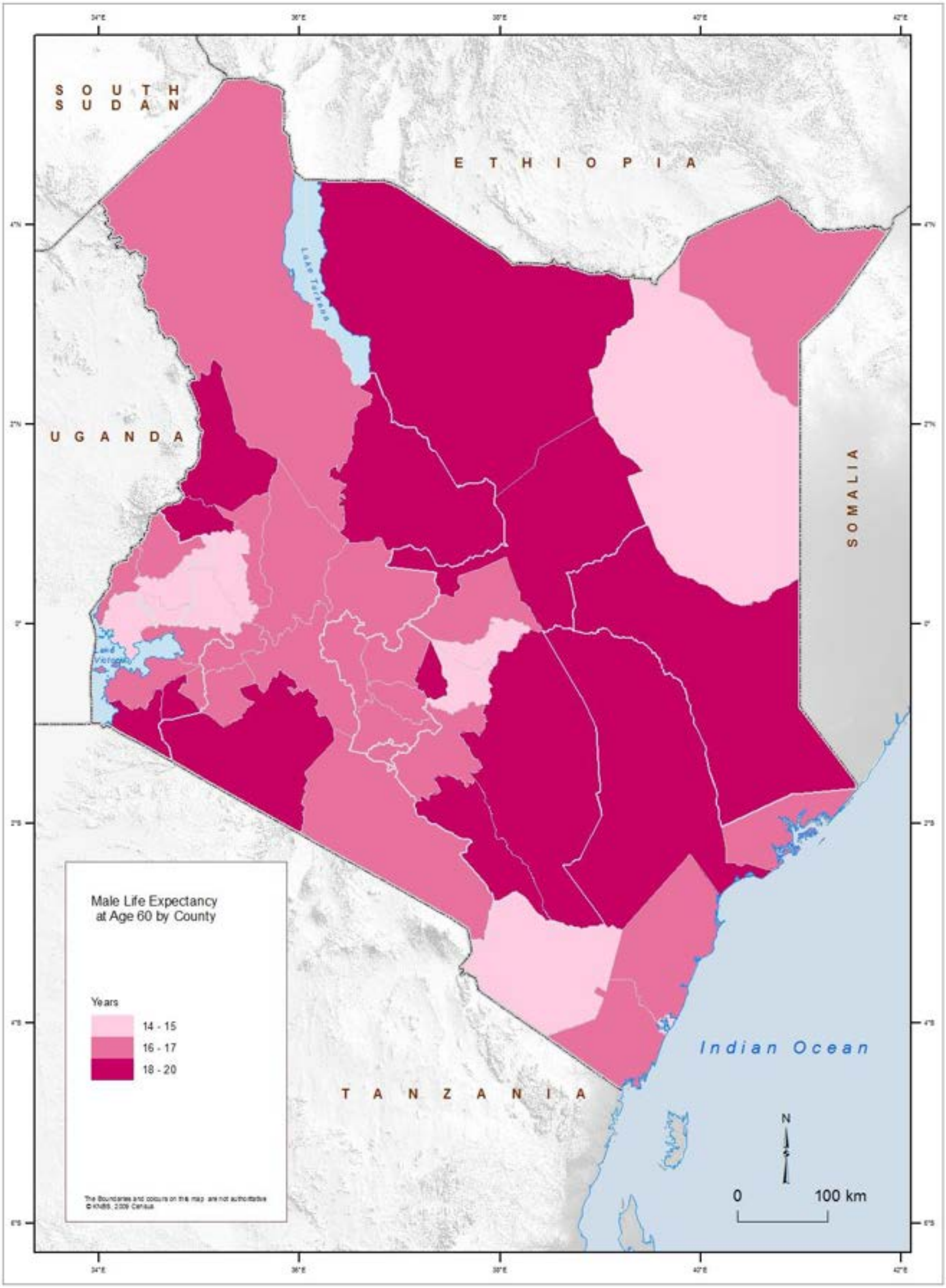
D.7: Female Life Expectancy at Age 60



D.8: Male Life Expectancy at Age 60

Life expectancy for men is shown in figure D.8. As expected men who reach age sixty may not live as long as their female counterparts as their life expectancy will be 20 compared to 28 years for females. Most regions show that life expectancy varies between 14 and 20 years meaning most men die off at between ages 74 and 80 once they reach age 60. The lowest male life expectancy was recorded in Wajir, Taita Taveta, Embu, Tharaka, Siaya , Vihiga, kakmega, Nandi and Uasin Gishu counties ranging between 14-15 years after age 60. Just like the life expectancy for the females, most of the counties with high life expectancy foe the makes were in the arid and semi arid regions of Kenya ranging between 18-20 years after age 60.

D.8: Life Expectancy at Age 60 –Male



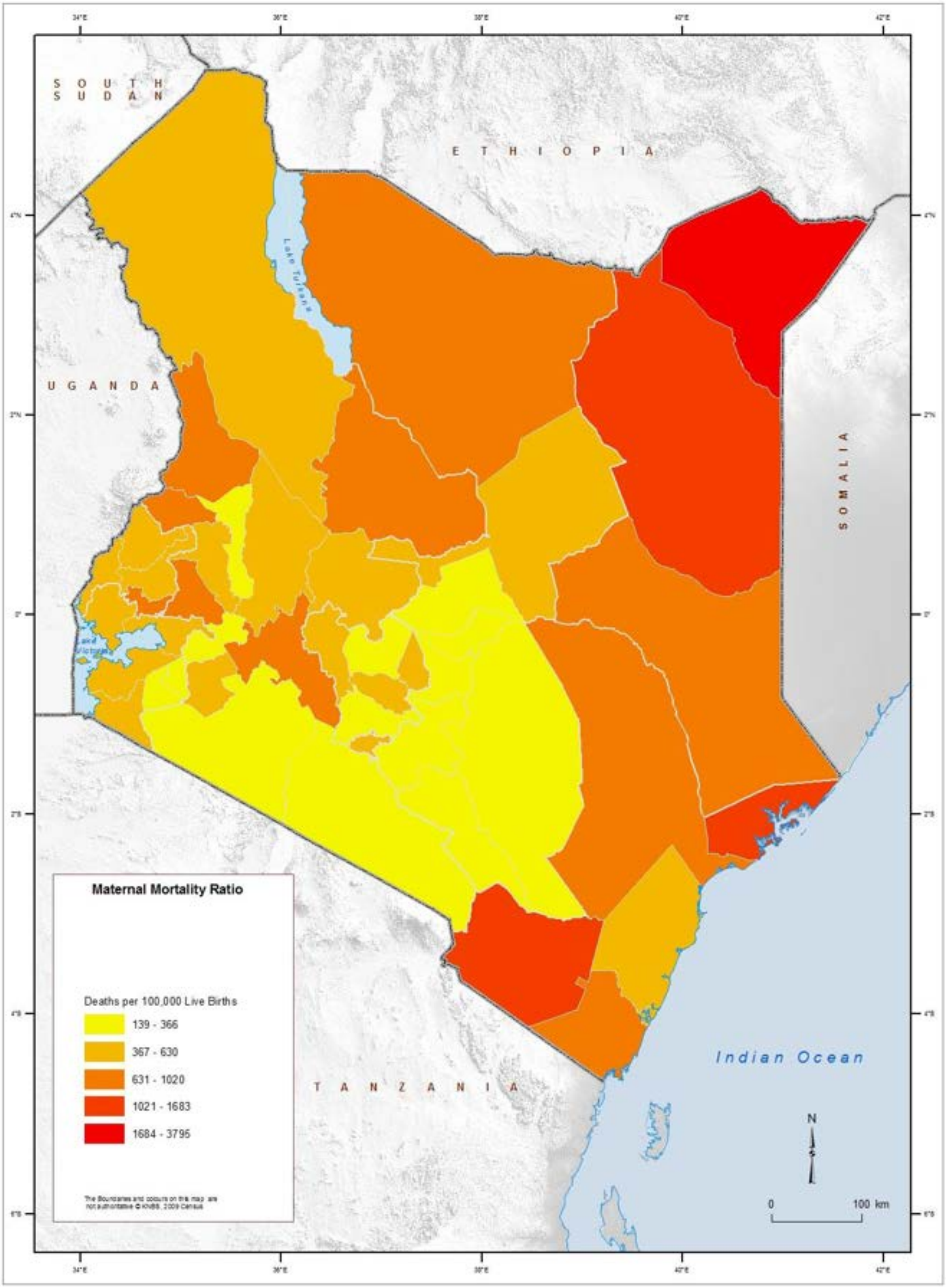
D.9: Maternal Mortality Ratio (MMR)

The status of maternal health in Kenya is still a challenge to the government and other stakeholders if Millennium Development Goal 5 (MDG #5) – to reduce maternal deaths by 75 per cent by 2015 is to be achieved. Evidence suggests that low progress has been made in achieving this goal as it still stands at a high of 488 maternal deaths per 100 000 live births nationally(2008/2009 KDHS). This is well above the anticipated ratio of 172 per 100,000 live births envisaged in MDG #5. In the 2010 round of censuses, the United Nations Statistical Division (UNSD) encouraged many developing countries to include questions on pregnancy related deaths as a way of helping improve on the quantity and quality of data needed in the estimation of maternal mortality in the world. The data shows that MMR for Kenya is 495. The map shows regional and county variations.

Variations in MMR

Map D.9 represents estimates of maternal mortality by county in Kenya based on data derived from questions on recent deaths in the household to females in the reproductive ages and whether they were pregnancy related. The map indicates that the overall maternal mortality ratio (MMR) for Kenya is 611 per 100,000 live births for the 2005. Fourteen counties had a maternal mortality ratio of between 139 and 366. These consist of Nyeri, Kiambu, Meru, Tharaka, Embu, Kitui, Machakos, Makueni, Kisii, Nyamira, Elgeyo Marakwet, Narok, Kajiado, and Kericho. The majority of the counties had an MMR of between 367 and 630. These include Nairobi, Nyandarua, Kirinyaga, Murang'a, Mombasa, Kilifi, Isiolo, Siaya, Kisumu, Homa Bay, Migori, Baringo, Uasin Gishu, Laikipia, Bomet, Kakamega, Bungoma, and Busia. Eight Counties had a MMR of between 631 and 1020. These are Kwale, Tana River, Marsabit, West Pokot, Samburu, Trans Nzoia, Nandi and Samburu. Three counties had an MMR of 1020 to 1683 while one county had an MMR of 3795. These are Lamu, Taita/Taveta, Wajir and Mandera respectively. Mandera had the highest MMR while Tharaka County had the lowest.

D.9: Maternal Mortality Ratio



Section E: Migration

Introduction

Migration is becoming increasingly important across all of Africa and some of the researchers on migration advocate for greater inclusion of migration issues in the processes of development planning. The Global Commission on International Migration advocates for mainstreaming of migration into strategic development frameworks.

Migration is one of the three components of population change, besides fertility and mortality. It influences the population structure, composition and size of a country. In the 21st century, migration has been a 'pivotal issue' in the study of human rights, development, and globalization, amongst others. Understanding of migration requires understanding of social, economic, demographic, environmental, and technological issues. This makes migration a multi-disciplinary field. Migration has also been a major contributor to technological transfers from more developed areas and/or countries to the developing and emerging economies. Labour migration is an important aspect in development of economies as it bridges the gap in labour capacities in countries or regions with inadequate labour supply. The benefits of migration are on both the sending and the receiving side. The migrants benefit in terms of skills, experiences, and incomes, whereas the receiving country benefits from cheap labour.

Patterns and major internal migration flows in Kenya have been influenced partly by colonial policies concerning land access, demand for labour in European settlements and taxation. The period immediately after independence saw the opening of high-wage jobs in urban areas. Following the removal of controls on urban in-migration in 1959, rural to urban migration increased to a level beyond the absorptive capacity of the urban economies.

In the first decade after independence, census data showed that most migrants were leaving from Nairobi, Central, Nyanza and the Western provinces. The Rift Valley and Nairobi were major in-migration regions. Rift Valley is basically an agricultural area with large cash crop farms; hence, it attracts much labour. More so, the area is conducive for both arable and livestock farming, it is more conducive for settlement than the other provinces. Nairobi also attracts more in-migration because of the attractive infrastructure, such as housing, hospitals, education facilities, and job opportunities.

The internal migration patterns in Kenya from 1969 to 1999 can be summarized into six broad types by destination: (a) resettlement areas, (b) cash crop growing areas, (c) nomadic areas, (d) border areas, (e) Western and Eastern regions of Kenya, and (f) migration in metropolitan areas.

The political and economic instability in Kenya in the 1980s and 1990s made emigrants increasingly stay overseas, rather than returning after some time (cyclical migration). Many workers also travelled to the Gulf States, and also to Rwanda, Burundi and the Congo in search of low skilled employment during the 1990s. There was also recruitment of Kenyan teachers to areas such as the Comoros Islands, Seychelles, Rwanda, Burundi and the Congo.

Areas around Nairobi, Mombasa and the Coast, as well as areas of commercial farming, are net areas of international immigration. On the other hand, there continues to be net out-migration from much of Western and Northern Kenya. Kenya also hosts refugees from the surrounding countries, and acts as a transit point for resettlement to third countries such as the US. In 2002, Kenya hosted just over 230,000 refugees and asylum seekers from neighbouring countries, notably Somalia and Sudan. There are also significant numbers of IDPs in Kenya. The reasons for displacement are complex, but are linked to land redistribution, inter-ethnic clashes and the introduction of multi-party democracy in 1992.

This section presents information on levels, trends and patterns of internal and international migration with a focus on recent and lifetime migrants. It also focuses on their demographic and socio-economic characteristics by provinces and counties. This is aimed at providing information for formulating appropriate policies on migration and developmental programmes that would positively impact on migration typologies, and related spatial distribution of the population in Kenya.

The 2009 Census captured migration information using the household questionnaire and the emigrant short questionnaire. The key migration variables were place of birth, previous residence, duration of residence, and place of enumeration. Members of the households were also asked to provide information on emigrants in the last fifteen years using a short questionnaire.

Concepts Used in Migration

Migration is the change of place of usual residence for a time period of three months or more of an individual or group of persons from an administrative area into another. Thus, a migrant is a person who moved from one political area to another.

Area of origin (departure) is a place from which a migrant moves, whereas, area of destination (arrival) is the area to which a migrant moves.

An in-migrant is a person who enters a migration-defining area by crossing its boundary from some point outside the area, but within the same country, whereas an immigrant is an international migrant entering the area from a place outside the country. On the other hand, an out-migrant is a person who departs from a migration-defining area by crossing its boundary to a point outside it, but within the same country.

Emigrant is an international migrant, departing to another country by crossing an international boundary.

Net-migration is the balance between in-migration and out-migration. According to direction of the balance, it may be characterized as net in-migration or net out-migration. Thus, net flow in or out is indicated by a plus (+) or minus (-) sign.

Lifetime migration is migration that occurred between birth and the time of the census or survey. Thus a lifetime migrant is one whose current area of residence is different from his area of birth, regardless of intervening migration. On the other hand, recent migrants were those enumerated during the census, relative to their previous place of residence a year prior to census.
Return migration occurs when a return migrant, that is, a person moves back to the area where he/she formerly resided.

Internal migration refers to migration across regional administrative boundaries within a country. Internal migration can be categorized by type (in-migration and out-migration) and directional flow (rural-urban, rural-rural, urban-rural, and urban-urban). On the other hand, international migration is the process by which one changes his place of usual residence by crossing the international boundaries into another country.

A **refugee** is a person who has been forced to leave his or her home and seek refuge elsewhere. Under the United Nations Convention Relating to the Status of Refugees of 1951, a refugee is more narrowly defined (in Article 1A) as a person who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country". The concept of a refugee was expanded by the Convention's 1967 Protocol and by regional conventions in Africa and Latin America to include persons who had fled war or other violence in their home country. Refugee women and children represent an additional subsection of refugees that need special attention.

E.1: Lifetime Migrants by Province and County

A person whose county of enumeration differed from his/her county of birth is considered as a lifetime migrant. The exact date of movement could not be determined as migration that occurred some years earlier, placed migrants in the same category as those who moved a short while before the census.

Lifetime In-migrants by County

Map E.1: A depicts spatial distribution of lifetime total in-migrants in Kenya by County. The map shows that Nairobi, and the central and southern regions of Rift Valley were areas of high lifetime in-migration. In general, it shows that northern parts of Rift valley, north of Eastern Province and North Eastern Province are regions of low lifetime in-migration, unlike the Western, Nyanza, lower Eastern and Central regions of Kenya. It is notable, however, that the magnitude of lifetime in-migration had increased in some provinces, while it had decreased in some. For instance, Nairobi and Rift Valley are usually known for being in-migration provinces as per the previous censuses; the 2009 census still indicate that they are still in-migration areas although the magnitude has tremendously dropped. Equally, there was a very high increase in the number of in-migrants in Central, Nyanza, Western, North Eastern and Coast Provinces contrary to the past experiences. This suggests that the reasons for in-migration for the individual provinces have changed. Counties in hardship areas attracted less lifetime in- migrants. Wajir, Mandera, Samburu, West Pokot, Marsabit, Turkana, Tharaka /Nithi Tana River, isiolo and Garissa counties had fewer lifetimes in- migrants below 30,000 persons. Counties which are either urban in nature or close to urban areas such as Kajiado and Kiambu had very high numbers of lifetime in – migrants. These included Nairobi, Nakuru, Kiambu, Mombasa, Uasin Gishu and Kjiando(especially, Kitengela, Ngong, Rongai, Kajiado Town and Isinya) with over 250,000 persons.

Lifetime Out-migrants by County

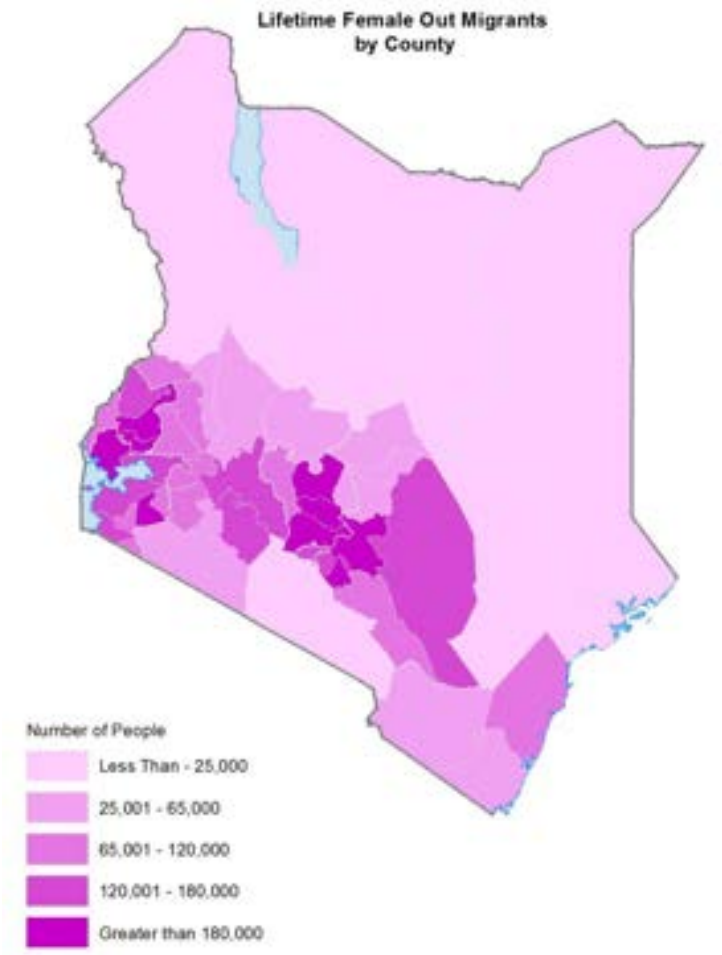
Map E.1: B depicts spatial distribution of lifetime total out-migrants in Kenya by County. It shows that Central province had the largest number of lifetime out-migrants, followed by Eastern, Western and Nyanza. Thus the counties in the Lower Eastern, Western and Nyanza provinces accounted for the majority of lifetime out-migrants. On the other hand, the county of Kajiado and those in Upper Eastern and Rift Valley provinces had the least numbers of out-migrants. The map shows that counties in arid and semi arid areas had very few lifetime out – migrants compared to other well –endowed areas. These were the same areas with very low lifetime in – migrants. These counties included Wajir, Mandera, samburu, West Pokot, Marsabit, Turkana, Kajiado , Tana River, Isiolo, Lamu and Garissa. Only 4 counties of Kisumu, Kitui, Nakuru and Nairobi had between 250,001 to 350,000 persons who were lifetime out – migrants. The highest number of lifetime out- migrants came from Siaya, Machakos, Kisii, Murang'a, Kakamega and Kiambu with over 360,000 persons.

Total lifetime net-migrants by counties

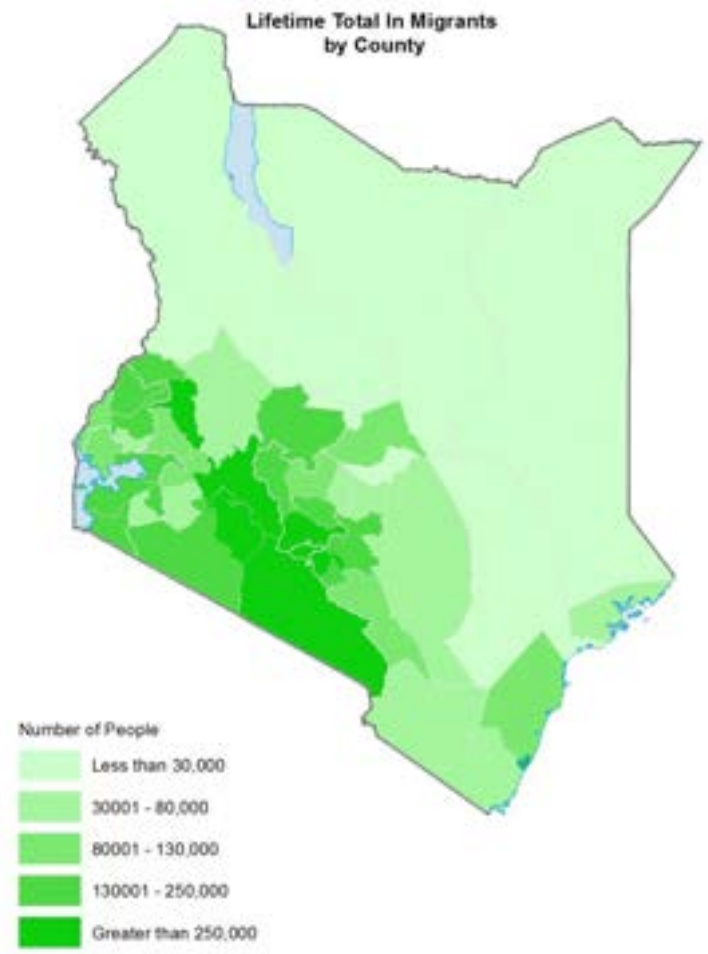
Map E.1:C shows Total lifetime net migration by counties. Counties in Western, Nyanza and lower Eastern provinces are areas of net loss of lifetime migrants, whereas Central and lower Rift Valley, Coast and Nairobi Provinces are areas of net gain of lifetime migrants. The ultimate impact of lifetime migration levels on the population of an area can be ascertained by assessing the net population flows of lifetime migrants. The traditionally lifetime net migration losers in Kenya (Central, Nyanza, Eastern, North Eastern and Western), had a net loss of lifetime migrants. Eastern province registered the highest lifetime net migrants, followed by Western, Nyanza and Central. This means that Central, Nyanza, Eastern, North Eastern and Western Provinces are out-migration areas, whereas, Nairobi, Coast and Rift Valley are in-migration areas. The map shows that Nairobi , being a capital city, attracted a larger number of lifetime net in- migrants registering over 400,000 persons. Other counties which registered lifetime net in- migrants included Lamu, Nyamira, Nyandarua, Kiambu, Laikipia, Narok, Trans Nzoia, Uasin Gishu, Kajiado, Nakuru and Mombasa. Counties which recorded more than 100,000 lifetime net out- migrants included Kisii, Vihiga, Murang'a, Siaya, Nyeri, Kakamega, Kitui, Machakos, Makueni, Bunggoma, and Homa Bay. Counties which registered the lowest lifetime net –migrants less than 45,000 persons included Embu, Kwale, Kirinyaga, Taita Taveta, Wajir, Mandera, Kericho, Kilifi, Samburu, Marsabit, Turkana , West Pokot, Kisumu, Garissa, Nandi, Meru, Isiolo, Tana River, and Migori.

E.1: A and B Life time Total Out and In Migrants by County

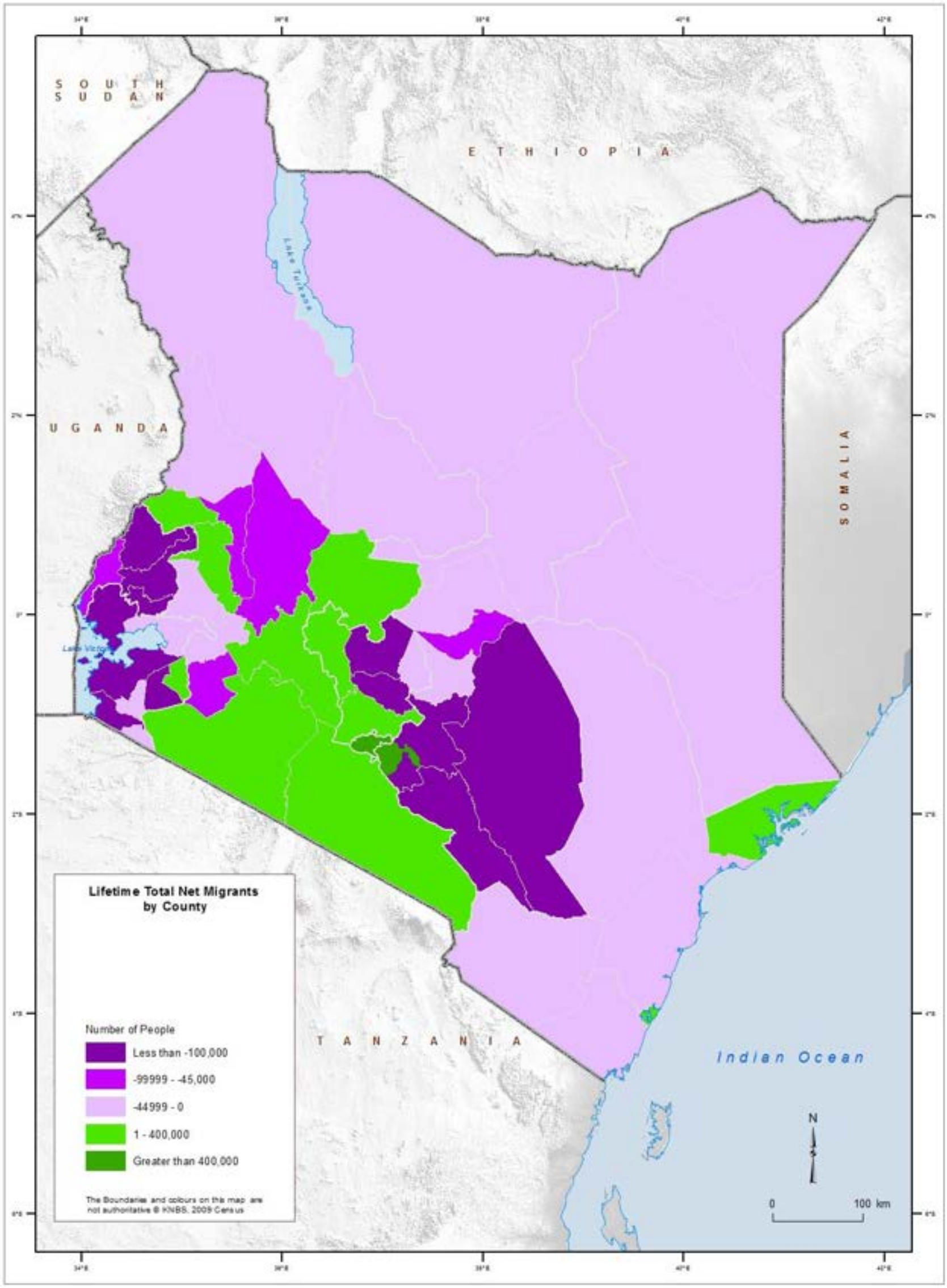
E.1:



E.1:B.



E.1: C Lifetime Total Net Migrants by County



E.2: Female lifetime in- migrants by counties

Map E.2:B shows female lifetime net migration by counties. Counties in Arid and Semi – Arid lands attracted less than 15,000 lifetime female in – migrants. These included Wajir, Mandera, Samburu, Marsabit, West Pokot, Turkana, Tharaka/Nithi, Garissa, Tana River, Lamu and Isiolo. Counties of Murang'a, Bungoma, Machakos, Laikipia, Migori, Nyamira, Homa Bay, Nyandarua and Kajiando had between 75,000 and 129,001 lifetime female in – migrants. Counties that recorded more lifetime female in – migrants than other counties included Kakamega, Trans Nzoia, Kisumu, Uasin Gishu, Mombasa, Kiambu, Nakuru and Nairobi. These counties had over 129,000 persons with Nairobi recording the highest number at 991,473 compared to the nearest county of Nakuru which had 297,473.

Female lifetime out- migrants by counties

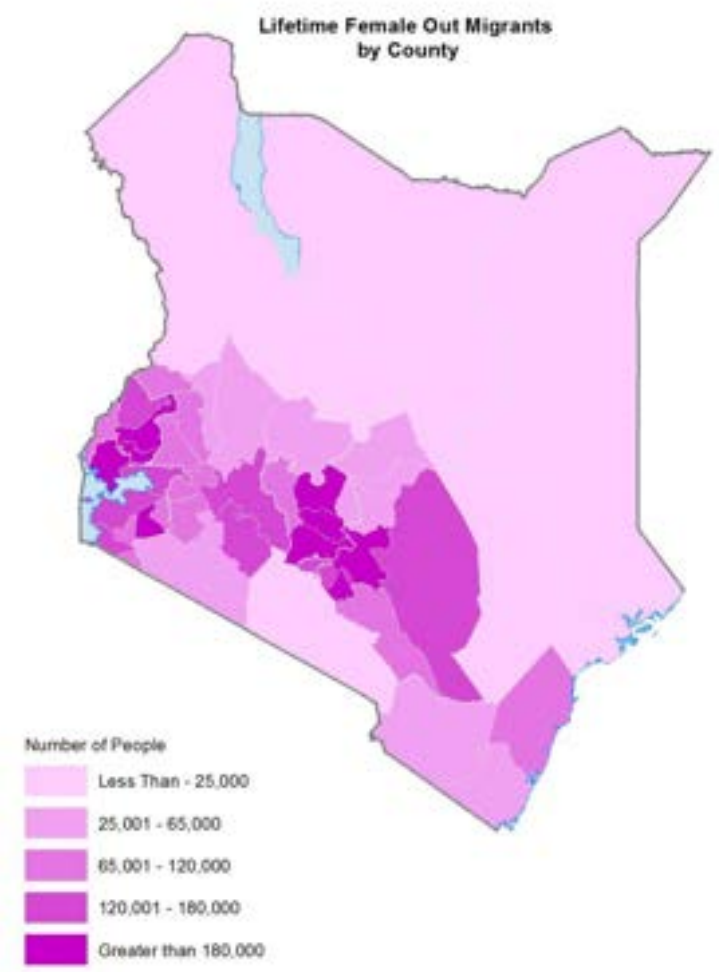
Some of the areas that recorded less lifetime female in- migrants also registered less lifetime female out – migrants. These counties recorded less than 25,000 person and included Lamu, Tana River, Isiolo, Samburu, West Pokot, Mandera, Marsabit, Wajir, Turakana, Kajiado and Garissa. Only six counties of Kitui, Bungoma, Homa bay, Kisumu, Nakuru and Nairobi had lifetime female out migrants ranginmg bweetn 120,000 and 180,001. Counties with the highest lifetime female out migrants were Nyeri, Vihiga, Machakos, Siaya, Kisii, Murang'a, Kakamega and Kiambu. They all recorded over 180,000 with Kiambu leading with about 247,570 persons. These are the same counties, with an exception of Nairobi, which had the highest male lifetime out migrants.

Female lifetime net-migrants by counties

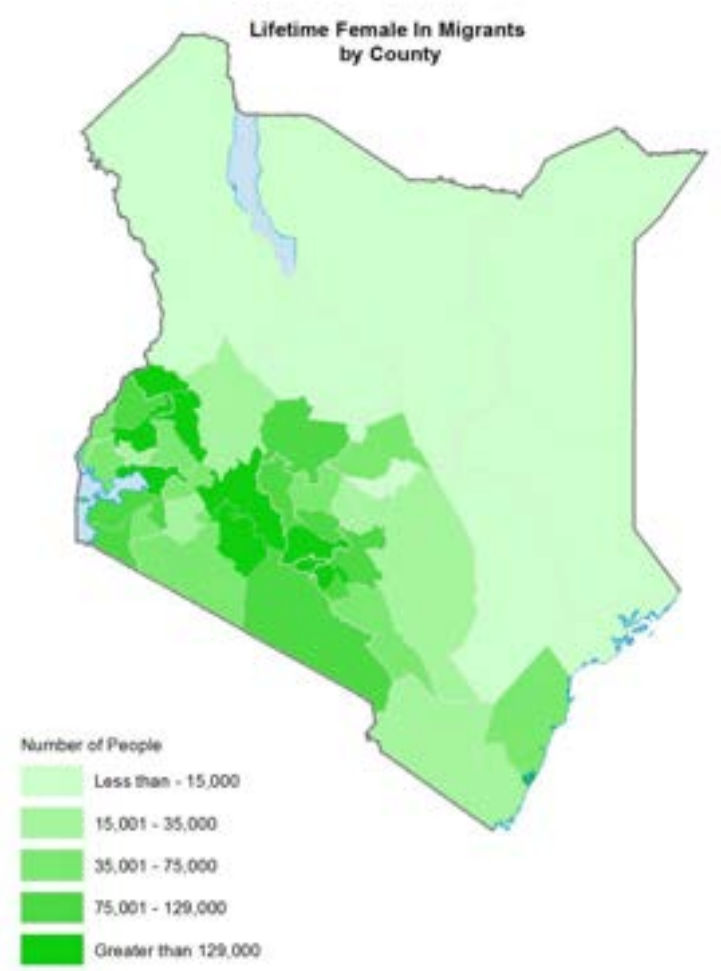
Seven counties of Kisii, Vihiga, Murang'a, Siaya, Nyeri, Machakos and Kakamega had more lifetime females who migrated out than those coming in thus resulting in a net outflow of lifetime females who migrated. These counties recorded more than 100,000 persons with Kisii registering over 160,000. Counties of lamu, Migori, Kiambu and Nyamira had a net inflow of lifetime female migrants up to 20,000. Counties which registered more than 20,000 inflow of lifetime female migrants included Nyamira, Laikipia, Narok, Trans Nzoia, Uasin Gishu, Kajiado, Nakuru, Mombasa and Nairobi. Nairobi recorded the highest number at 834,960.

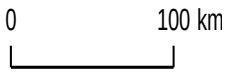
E.2 A and B: Lifetime Female Out and In-Migrants by County

E.2: A



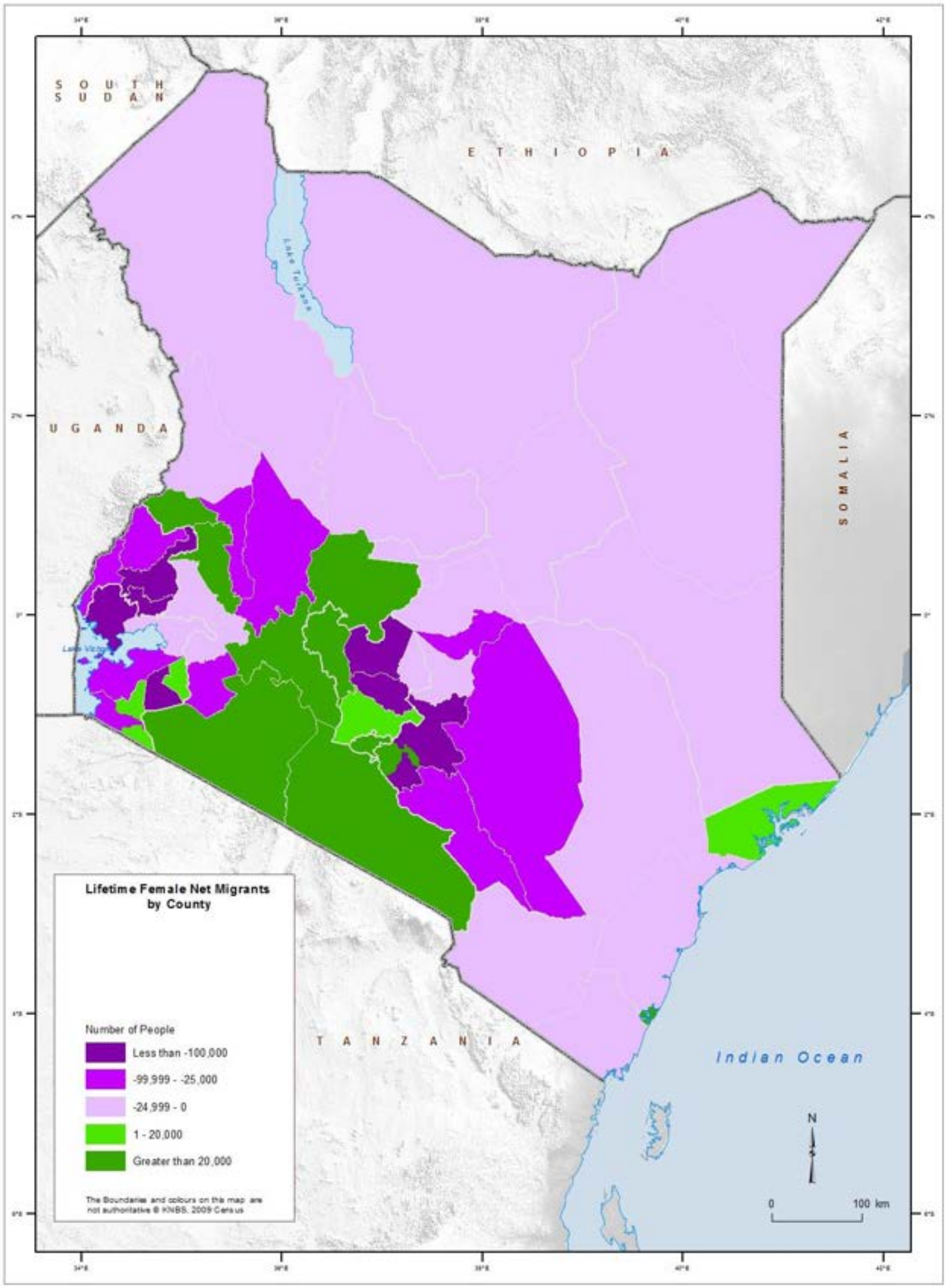
E.2: B





The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

E.2: C Lifetime Female Net Migrants by County



E.3: Male lifetime in- migrants by counties

Twenty two counties, most of them hardship areas, attracted very minimal lifetime male in-migrants. These counties had lifetime makle in- migrants of less than 36,000 persons. They included Mandera, Wajir, Samburu , West Pokot, Tharaka/Nithi, Marsabit, Turakana, Elgeyo/Marakwet, Isiolo, Tana River, Vihiga, Baringo, Kitui, Lamu, Kisii, Taita Taveta, Kirinyaga, Embu, Buret, Kwale and Busia. Well endowed counties of Uasin Gishu, Kiambu, Momabasa and Nakuru attracted more lifetime male in – migrants ranging from 160,001 to 300,000. Nairobi attracted more than one million lifetime male in –migrants during the period under review.

Male lifetime out- migrants by counties

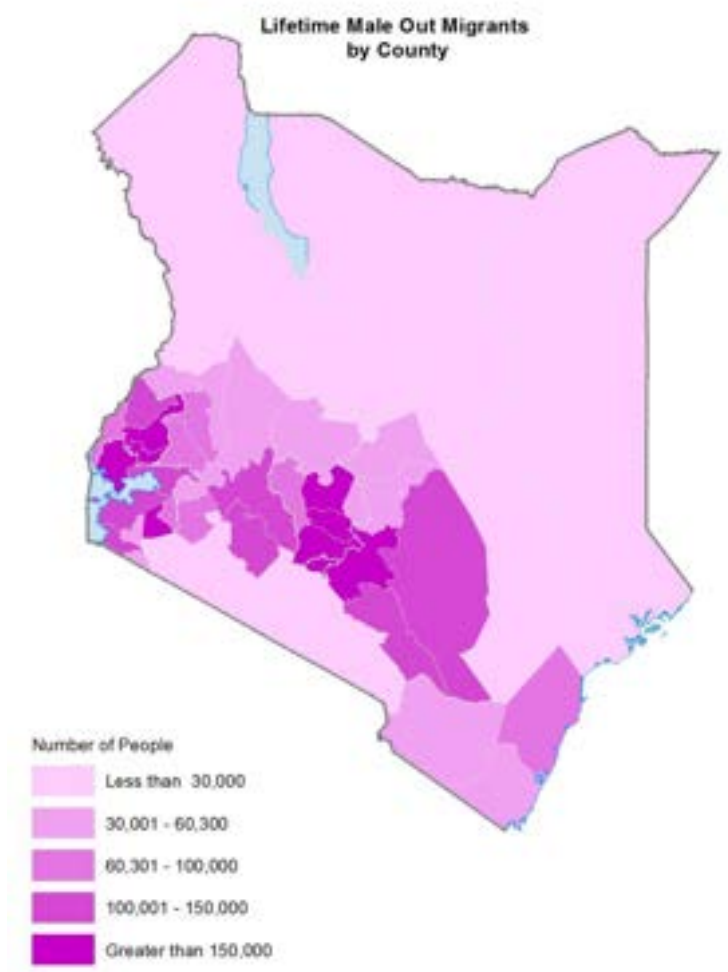
About a quarter of the counties which included Lamu, West Pokot, tana River, Isiolo, samburu, Wajir, Mandera, Marsabit, Kajiado, Turkana, Garissa and Narok had less lifetime male out migrants below 30,000 compared to other counties. Only six counties had lifetime male out – migrants of between 100,000 and 150,001. These included Homa Bay, Kisumu, Bungoma, Makueni, Nakuru, and Kitui. A total of nine counties: Nairobi, Nyeri, Siaya, Vihiga, Machakos, Kakamega, Murang'a, Kisii and Kiambu had a greater number of lifetime out – migrants above 150,000 persons.

Male lifetime net- migrants by counties

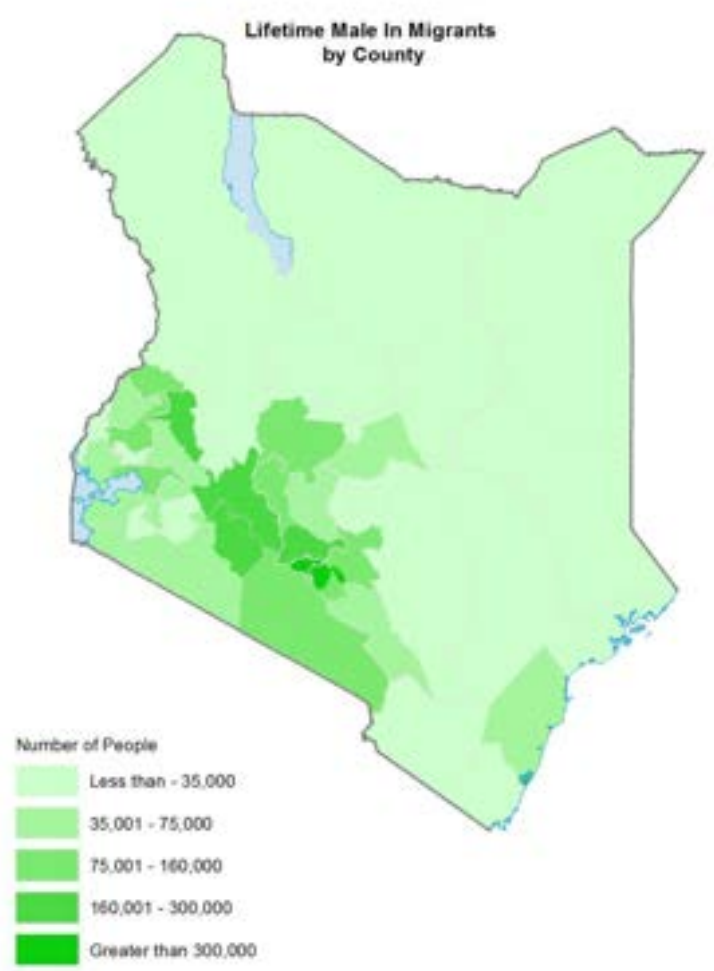
Thirty four counties had more lifetime net males who migrated out than those who came in. The worst hit counties included Kisii, Vihiga, Murang;a , Kakamega, Kitui, Siaya, Nyeri and Machakos. These had over 100, 000 males with Kusii having over 190,000. The data shows that counties of Meru, lamu, Nyamira, Nyandarua, Laikipia, Kiambu, Narok, Trans Nzoia, Uasin Gishu, Kajiaqdo and Nakuru had more male migrants who came in than those who went out thus resulting into greater net migrants of less than 200,001 persons. Nairobi and Mombasa being the biggest cities with high population registered 911, 486 and 214,342 male net migrants respectively.

E.3: A and B Lifetime Male Out and In Migrants by County

E.3:A.



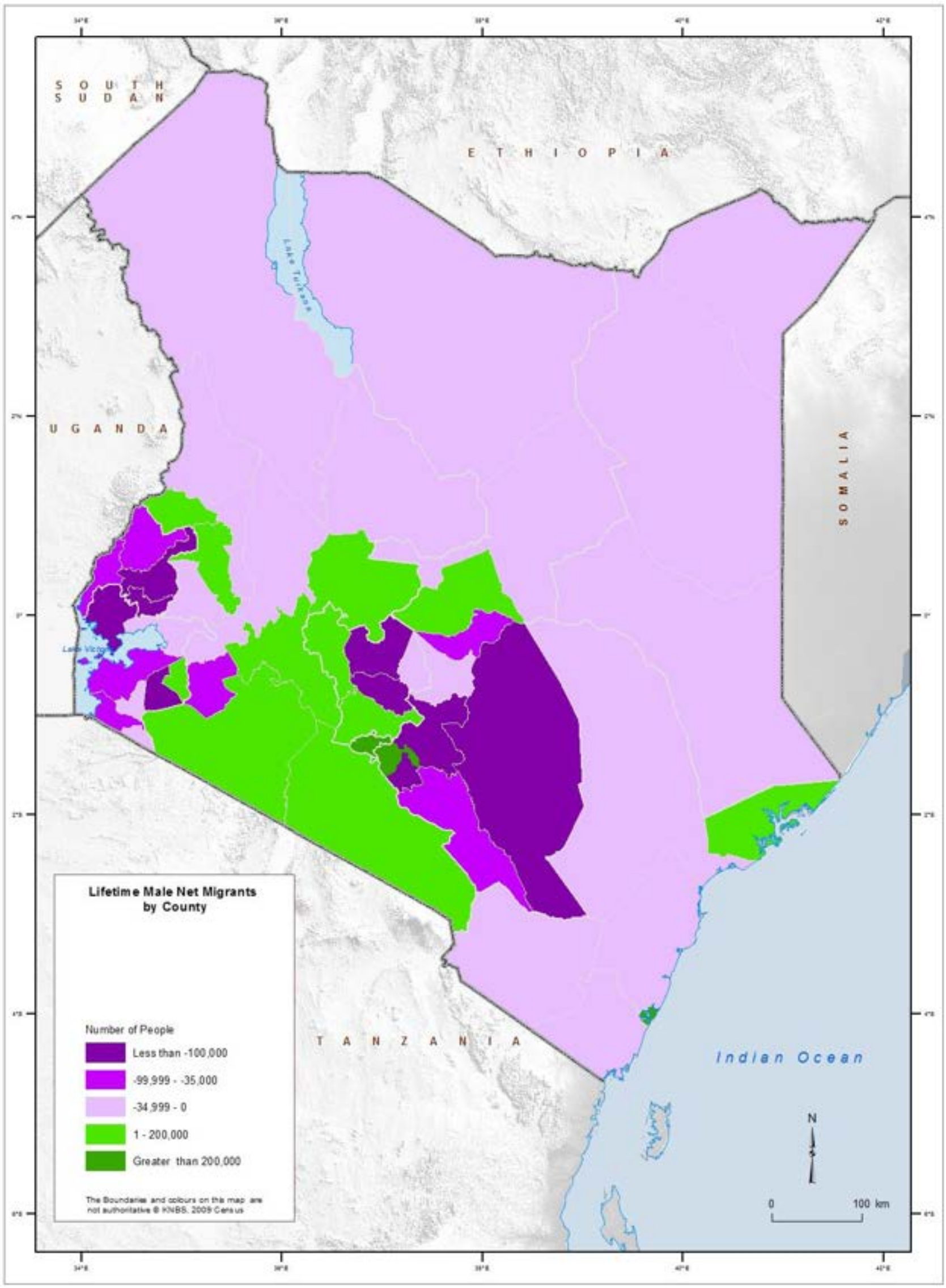
E.3: B.





The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

E.3: C Lifetime Male Net Migrants by County



E.4: Recent Net Migrants

The level of recent net migrants is obtained by subtracting recent out-migrants from recent in-migrants. Thus, it shows the net effect of recent population movements by provinces and counties. There was positive recent net-migration in Nairobi, Central, Coast and Rift Valley Provinces. However, Nyanza, Western, North Eastern and Eastern Provinces recorded net loss of migrants: Regions that experienced positive recent net migration have the immediate burden of providing various social amenities required by the new population, notwithstanding some gains that may be brought by the migrants

Total Recent In- Migrants by County

Map E.4. B shows the total recent in- migrants by county. Counties of wajir, mandera, west Pokot, Marsabit, Samburu, Turkana, Tharaka Nithi, Elgeyo Marakwet, Isiolo and Tana River had less than 5,000 total recent in- migrants. Counties of Kajiado, Uasin Gishu, Murang'a, Mombasa, Nakuru, Kiambu, Nyamira and Nairobi had more than 45,000 total recent in – migrants with Nairobi recording the highest at 247,000 followed by Nyamira at 116,000 and Kiambu at 95,000.

Total Recent Out- Migrants by County

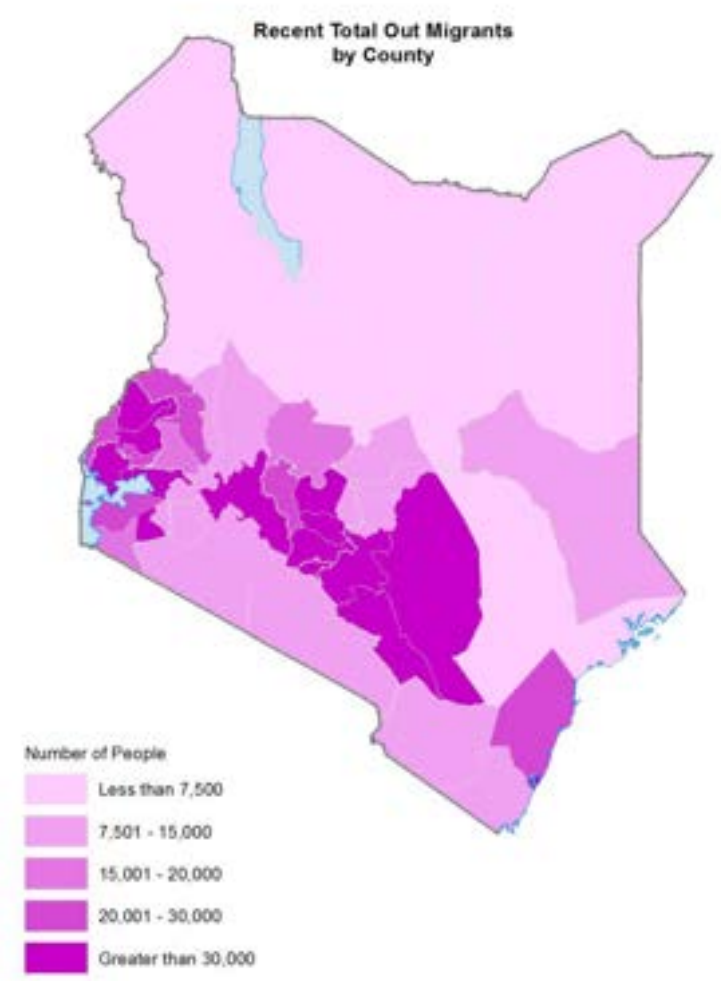
Map E.4.A presents the spatial distribution of the total trecent out – migrants by county. Counties of Lamu, West Pokot, Mandera, Wajir, Samburu, Tana River and Turkana had less than 7,500 total recent out- migrants. On the other hand, counties of Kilifi, Trans Nzoia, Busia, Nyandarua,Homa Bay, Vihiga and Uasin Gishu had between20,000 and 30,001 total recent out – migrants. The counties that recorded the highest total recent out – migrants of over 30,000 included Bungoma, Siaya, Makueni, Murang'a, Nyeri, Kisumu, Mombasa, Machakos, Kitui, Kakamega, Nakuru, Kiambu , Kisii and Nairobi. Nairobi county had over 153,000 followed by Kisii with 146,000 and Kiambu with 97,000.

Total Recent Net- Migrants by County

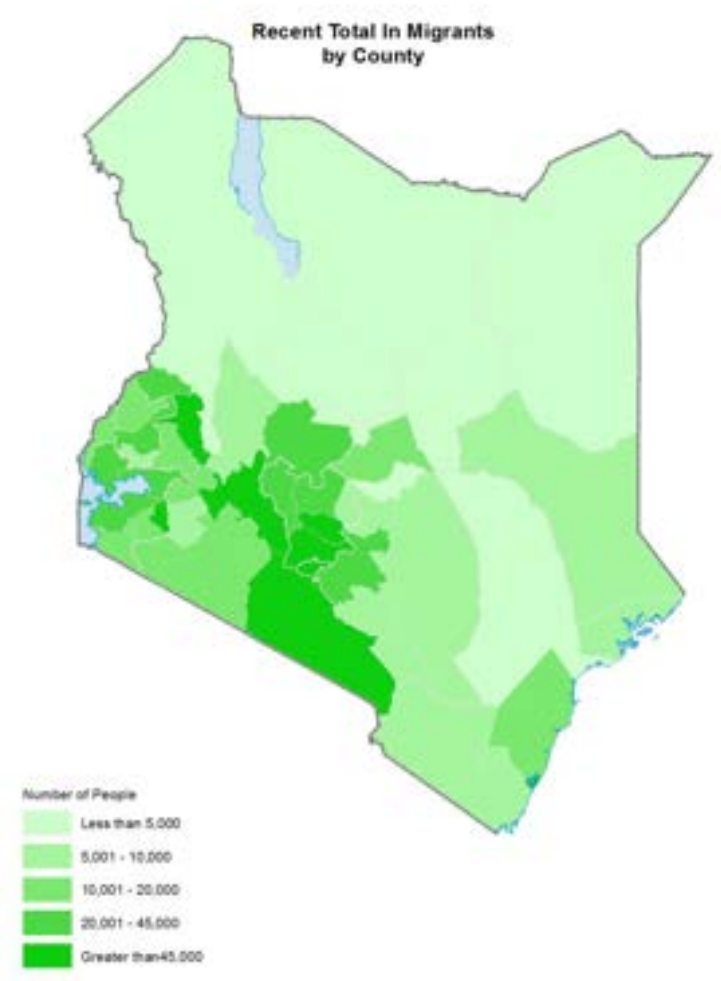
Map E.4.C shows the total recent net – migrants by county. Counties with a net loss of over 8,000 total recent net migrants included Kisii, Kitui, Makueni, Kakamega, Vihiga, Bungoma, machakos, Tharaka/ Nithi, Nyeri and Busia. The highest recorded total recent net-migrants were in Kisii with about 133,000 followed by Kitui with about 40,000. Counties that recorded a net gain of total recent net-migrants of over 3,000 included Nyandarua, Kisumu, narok, nakuru, Uasin Gishu, Mombasa, kajiado, Murang'a, NAIROBI AND Nyamira. Nairobi and Nyamira recorded about 94,000 and 101,000 total recent net migrants respectively.

E.4: A and B Total Recent Out and In Migrants by County

E.4:A.



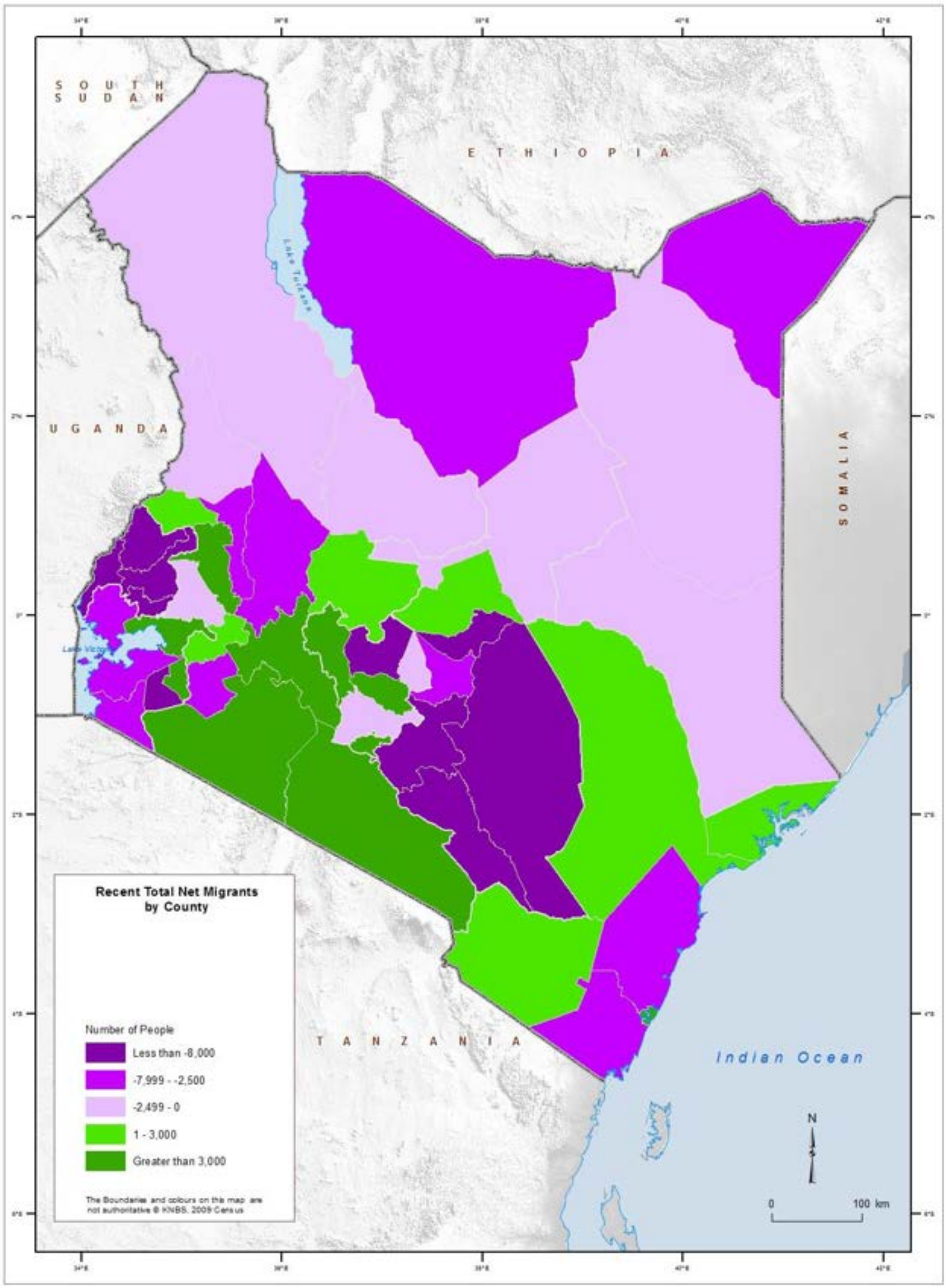
E.4: B



0 100 km

The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

E.4: C Recent Total Net Migrants by County



E.5: Recent Female Net ~Migrants by counties

Recent Female In~Migrants by County

Map E.5.B shows the recent female in – migrants by county. Counties of Mandera, wajir, West Pokot, Marsabit, Samburu, and Isiolo had less than 2,000 recent female in – migrants compatred to other counties. Counties of Kakamega, Kisumu, Uasin Gishu, Kajiado, Murang'a, Mombasa, nakuru, Kiambu,Nyamira and Nairobi recorded over15,000 recent female in – migrants with nairobi alone registering over 130,000 followed by Nyamira with about 61,000.

Recent Female Out~ Migrants by County

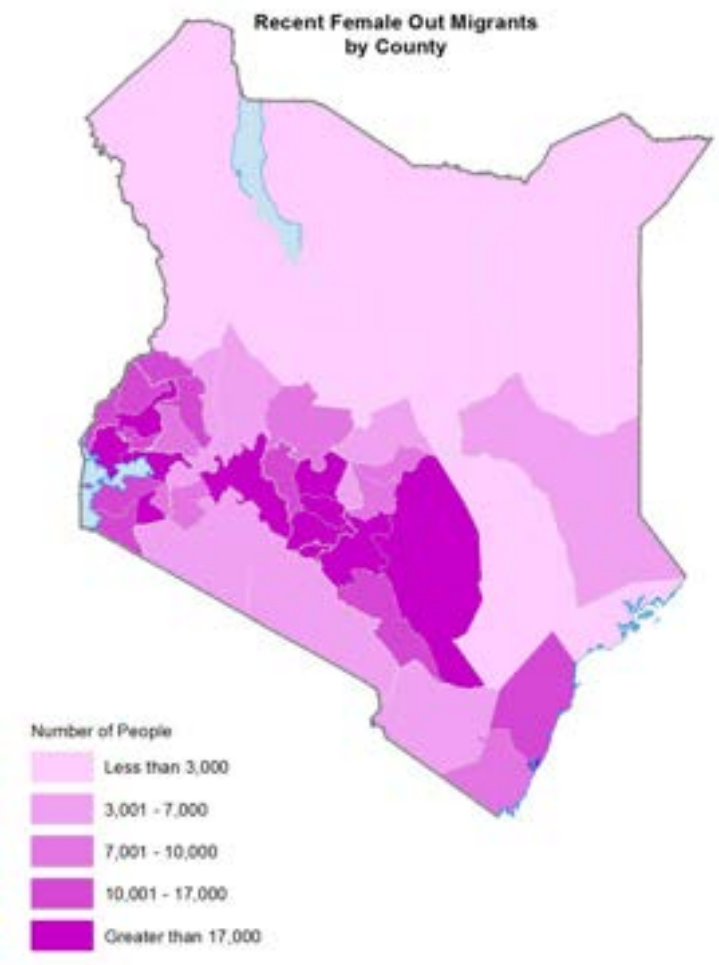
Map E.5.A presents the recent female out – migrants by county. Counties which recorded less than 3,000 recent female out – migrants included Lamu, West Pokot, Mandera, Samburu, Wajir, Turkana, Tana River, Isiolo and Marsabit. Counties of Nyeri, Murang'a, Siaya, Kisumu, Mombasa, Machakos, Kitui, Kakamega, Nakuru, Kiambu, Kisii and Nairobi registered over 17,000 recent female out – migrants. Nairobi and Kisii had the highest at over 76,000 followed by Kiambu at about 50,000.

Recent Female Net ~ Migrants by County

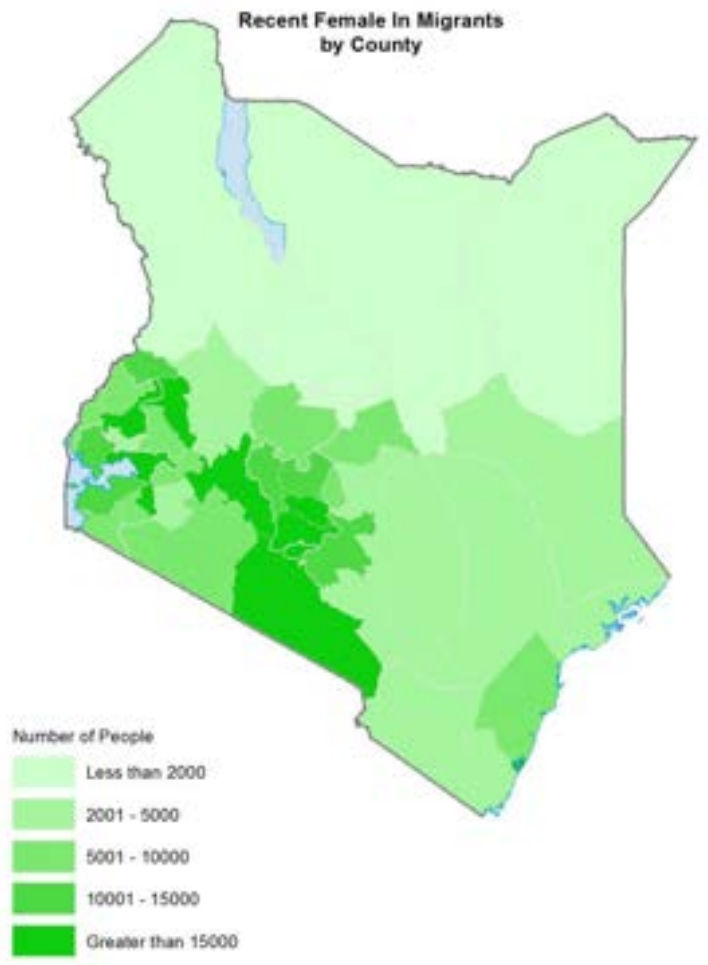
Map E.5.C shows the recent female net – migrants by county. Counties of Kisii, Kitui, Makueni, Kakamega, Vihiga, Machakos, Bungoma, Nyeri, Tharaka/Nithi, Siaya and Busia recorded over 4,500 net loss of recent female migrants. Kisii and Kitui registered the highest number of over 69,000 and 21,000 respectively. Counties that recorded the highest net gain of over 1,500 recent female migrants included Laikipia, Kisumu, Narok, Nakuru, Uasin Gishu, Murang'a, Mombasa, Kajiado, Nyamira and Nairobi. Nairobi and Nyamira had about 57,000 and 54,000 recent female net gain of migrants respectively.

E.5: A.and B Recent Female Out and In Migrants By County

E.5: A



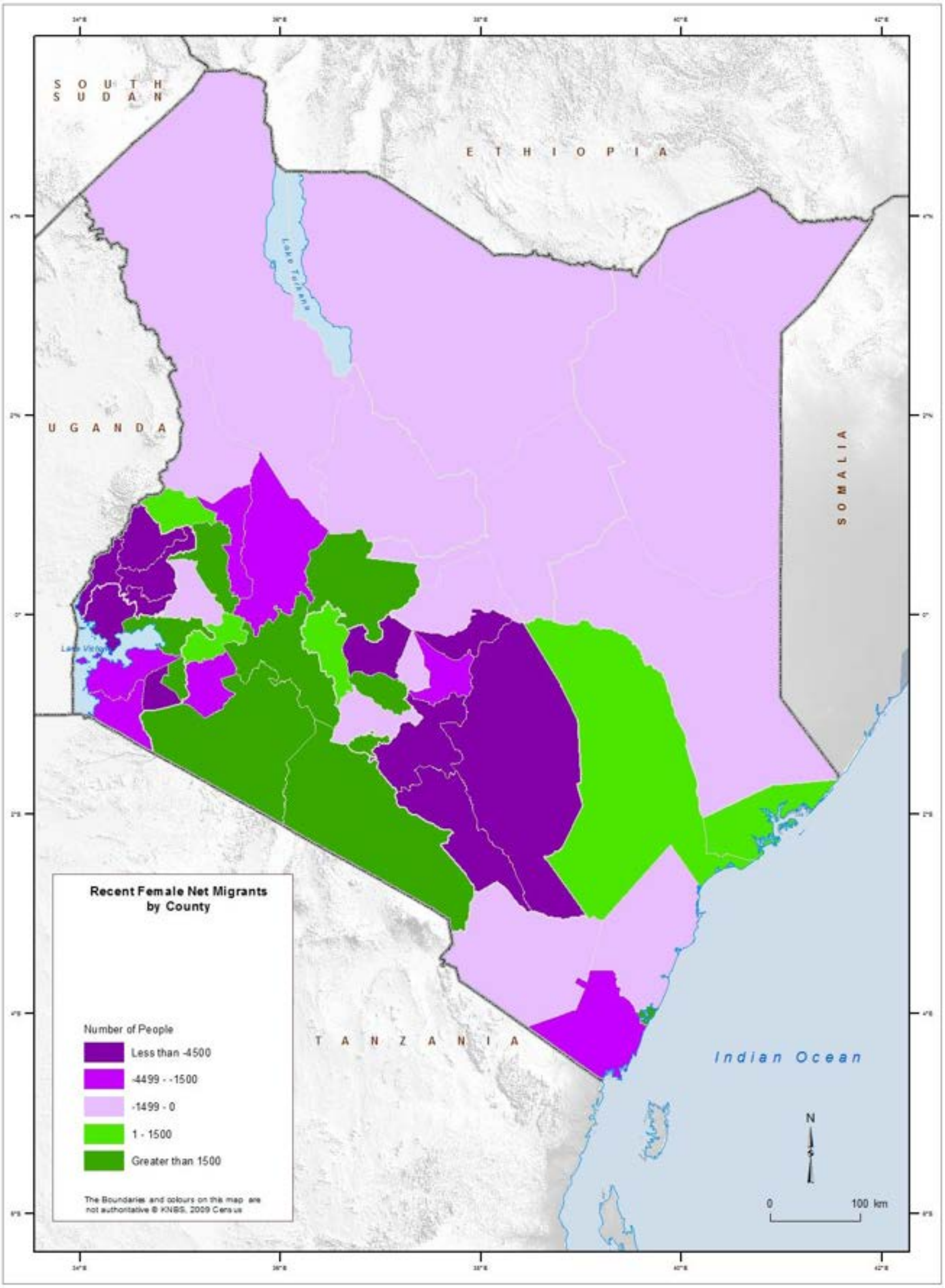
E.5:B





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E.5: C Recent Female Net Migrants by County



E.6: Recent Male Migrants

The level of recent male net migrants is obtained by subtracting recent male out-migrants from recent male in-migrants. Thus, it shows the net effect of recent male population movements by provinces and counties. The map shows that there was positive recent net-migration in Nairobi, Rift Valley, Central and Coast. However, the following provinces recorded net loss of migrants: Nyanza, Western , Eastern and North Eastern . The maps show that counties in Nyanza, Western, Eastern and Central province are regions of net out-migration, whereas the counties of Nairobi, Rift Valley and Coast provinces are regions of net in-migration.

Recent Male In- Migrants by County

Map E.6.B shows the recent male in – migrants by county. Counties that registered less than 3,000 recent male in – migrants included Mandera, West Pokot, Wajir, Marsabit, Turkana, Tharaka/Nithi,, Samburu, Elgeyo Marakwet, Kitui, Tana River and Isiolo. Counties that recorded over 15,000 recent male in – migrants included Machakos, Kisumu, Kajiado, Uasin Gishu, Murang'a, Mombasa, Nakuru, Kiambu, Nyamira and Nairobi. Nairobi and Nyamira registered about 113,000 and 55,000 recent male in – migrants respectively.

Recent Male Out- Migrants by County

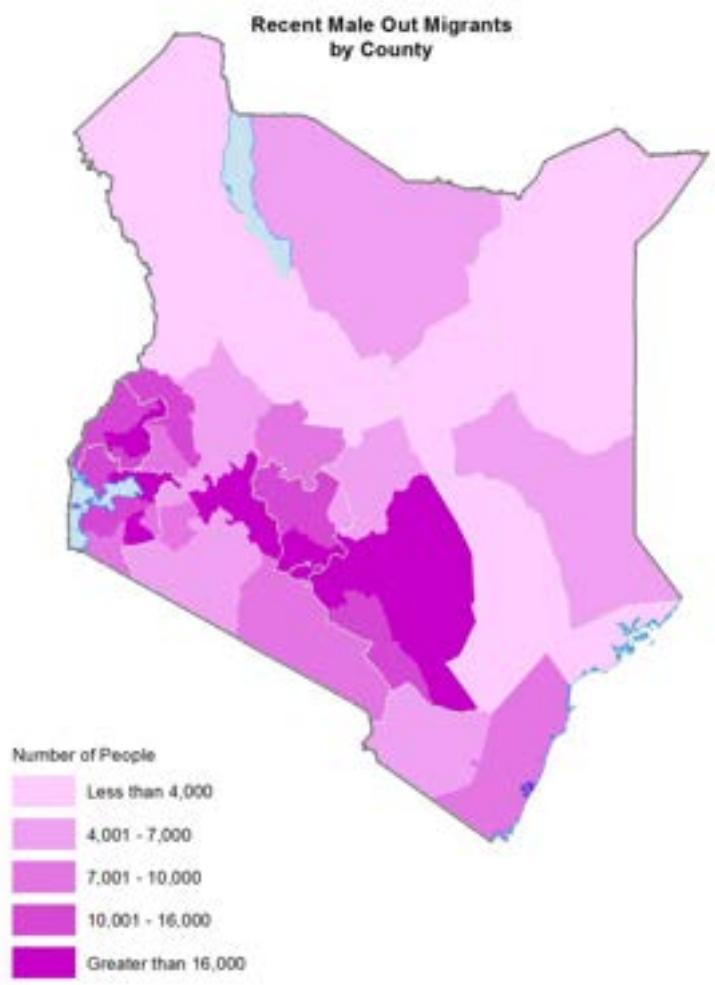
Map E.6.A shows the recent male out – migrants by county. The counties of lamu, West Pokot, Mandera, Wajir, Tana River, Samburu, Turakana and Isiolo recorded less than 4,000 recent male out – migrants. Counties that registered the highest recent male out – migrants of over 16,000 included Kisumu, Machakos, Mombasa, Kitui, Kakamega, Nakuru, Kiambu, Kisii and Nairobi with Nairobi and Kissi recording over 76,000 and 70,000 males respectively.

Recent Male Net - Migrants by County

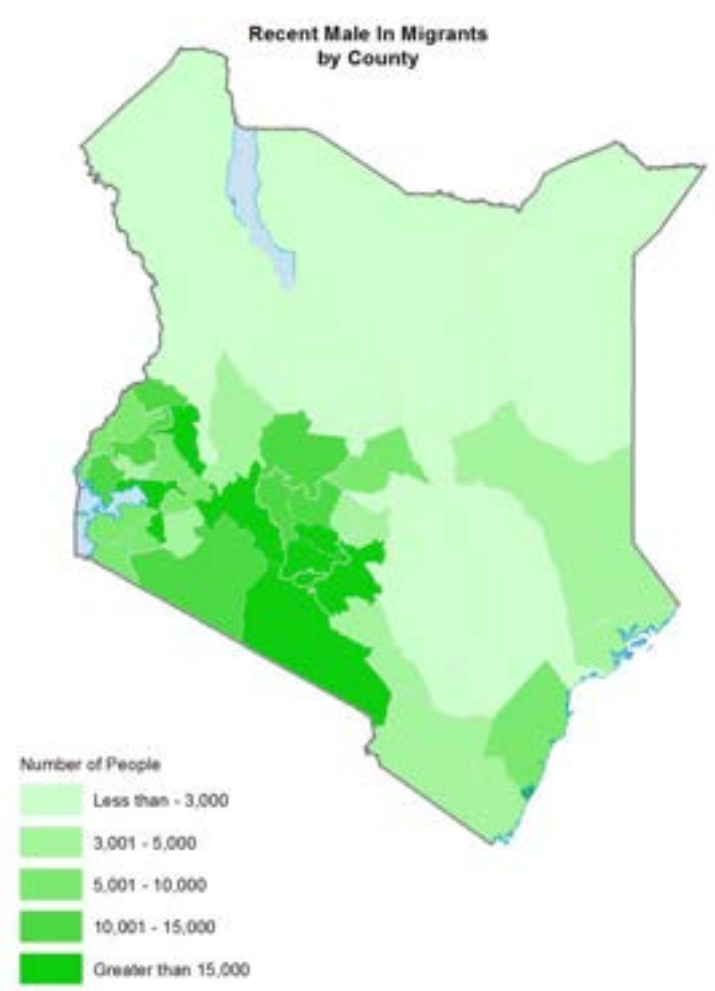
Map E.6.C shows the recent male net – migrants by county. Counties of Kisii, Kitui, Makueni, kakamega, Vihiga, Bungoma, Tharaka/Nithi, Busia, nyeri, Siaya, Buret and Machakos has a net loss of recent male migrants of over 2,500. Kisii lost over 63,000 male migrantrs followed by Kitui with over 19,000. On the other hand, counties that had a greater gain of over 2,000 recent male migrants were Kisumu, Narok, Nakuru, Uasin Gishu, Mombasa, kajiado, Murang'a Nairobi and Nyamira. Nairobi and Nyamira gained about 36,000 and 47,000 recent male migrants respectively.

E.6: A Recent Male Out and In Migrants by County

E.6: A.



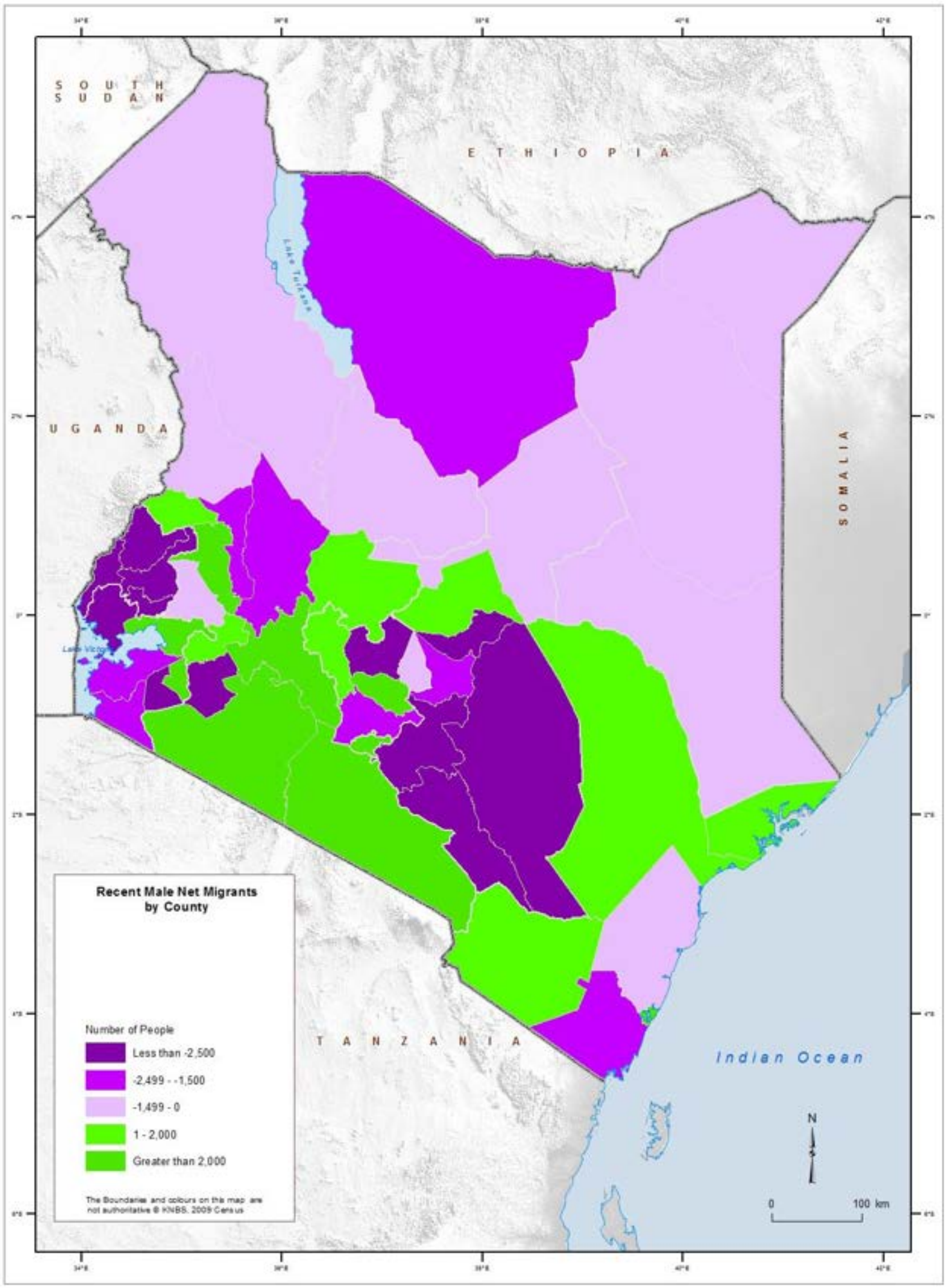
E.6: B.



0 100 km

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E.6: C Recent Male Net Migrants by County



Section F: Urbanisation

This section presents information on urbanization in Kenya. Kenya lacks a comprehensive National Urban Policy. This presents a major challenge in achieving sustainable urban development. Policies and strategies related to urbanization have traditionally been formulated within the framework of broader national and, or, sectoral development plans and policies. However, an urban development policy for Kenya is under formulation. This new policy aims to guide aspects of urban development countrywide, such as development planning, land management, urban investment and delivery of infrastructure and services. In a broader national context, Kenya's Vision 2030 aims to transform Kenya into a newly-industrialising, middle-income country providing a high quality of life to all its citizens in a clean and secure environment (Kenya 2007).

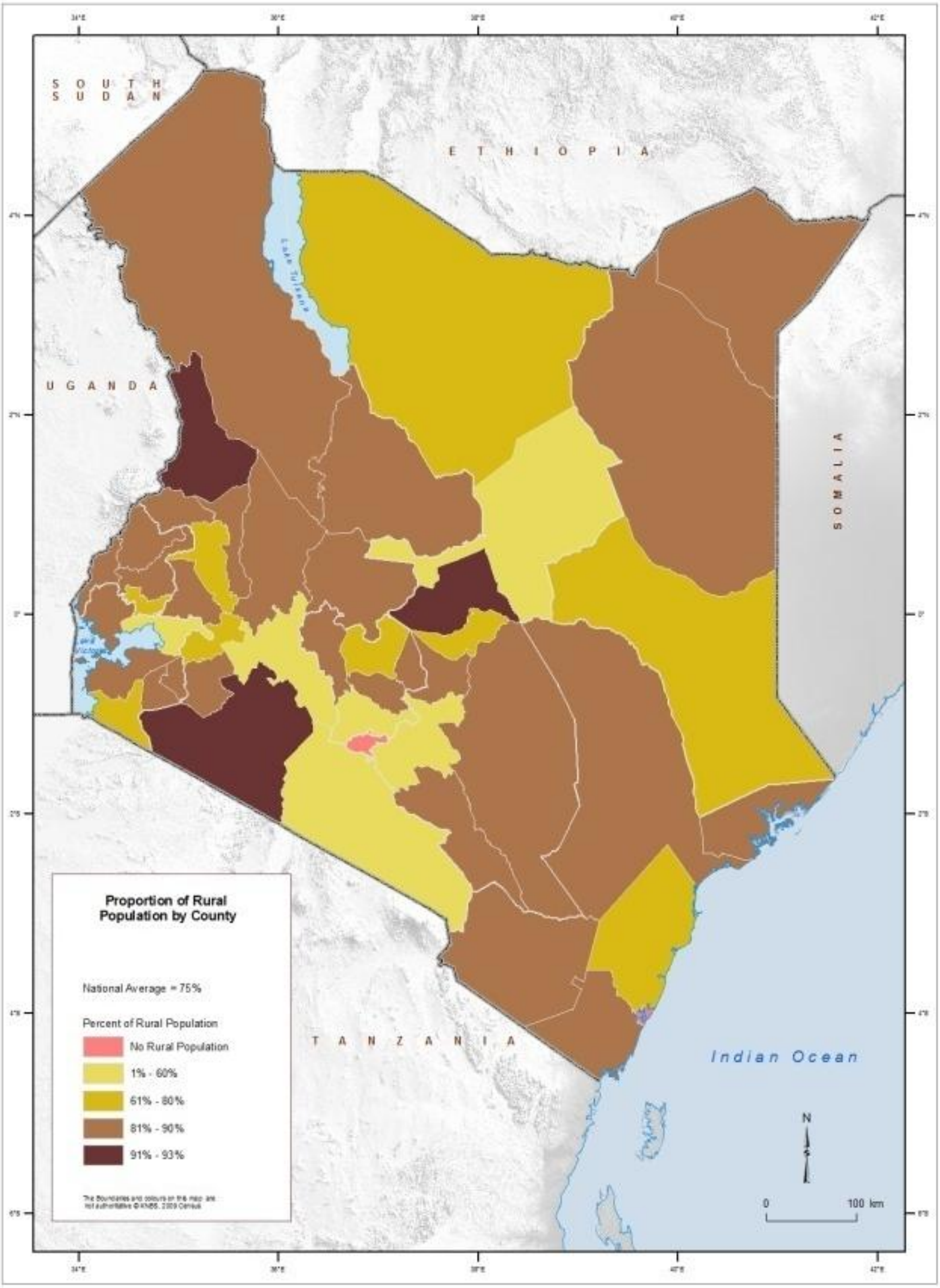
Vision 2030 recognises that Kenya is moving towards a predominantly urban population and should plan for high quality urban livelihoods. Urbanization in Kenya is almost entirely a twentieth century phenomenon. Pre-colonial urbanization mainly developed in the coastal zone as a result of triangular trade between East Africa, India, and Arabia. As such, urbanization in Kenya has a long history in the coastal region but a short history in the interior parts of the country. A more consolidated hierarchy of urban centres developed during the colonial period. The British administration created a number of administrative centres which also doubled as market and commercial centres. The Kenya-Uganda railway also provided an opportunity for establishment of more inland urban centres along the railway line. Furthermore, the large scale European commercial cash crop farming in the White Highlands led to the development of another hierarchy of agricultural market and trading centres. The growth of urban centres both in numbers and population accelerated after independence, when Africans were allowed to migrate to towns without any legal and administrative restrictions.

The urban population grew from 285,000 (5.2 percent) in 1948 to 1 million in 1969, increasing at a rate of 7.1 percent per year. According to the 2009 Census, the number of Kenyans living in urban areas increased to 12.5 million. The proportion of the urban population to the total population rose to 31.3 percent. While Nairobi continues to have the largest share of the urban population, the importance of small and medium-size urban centres is beginning to emerge in the urban hierarchy. Rural-to-urban migration continues to be the major source of urban growth in Kenya

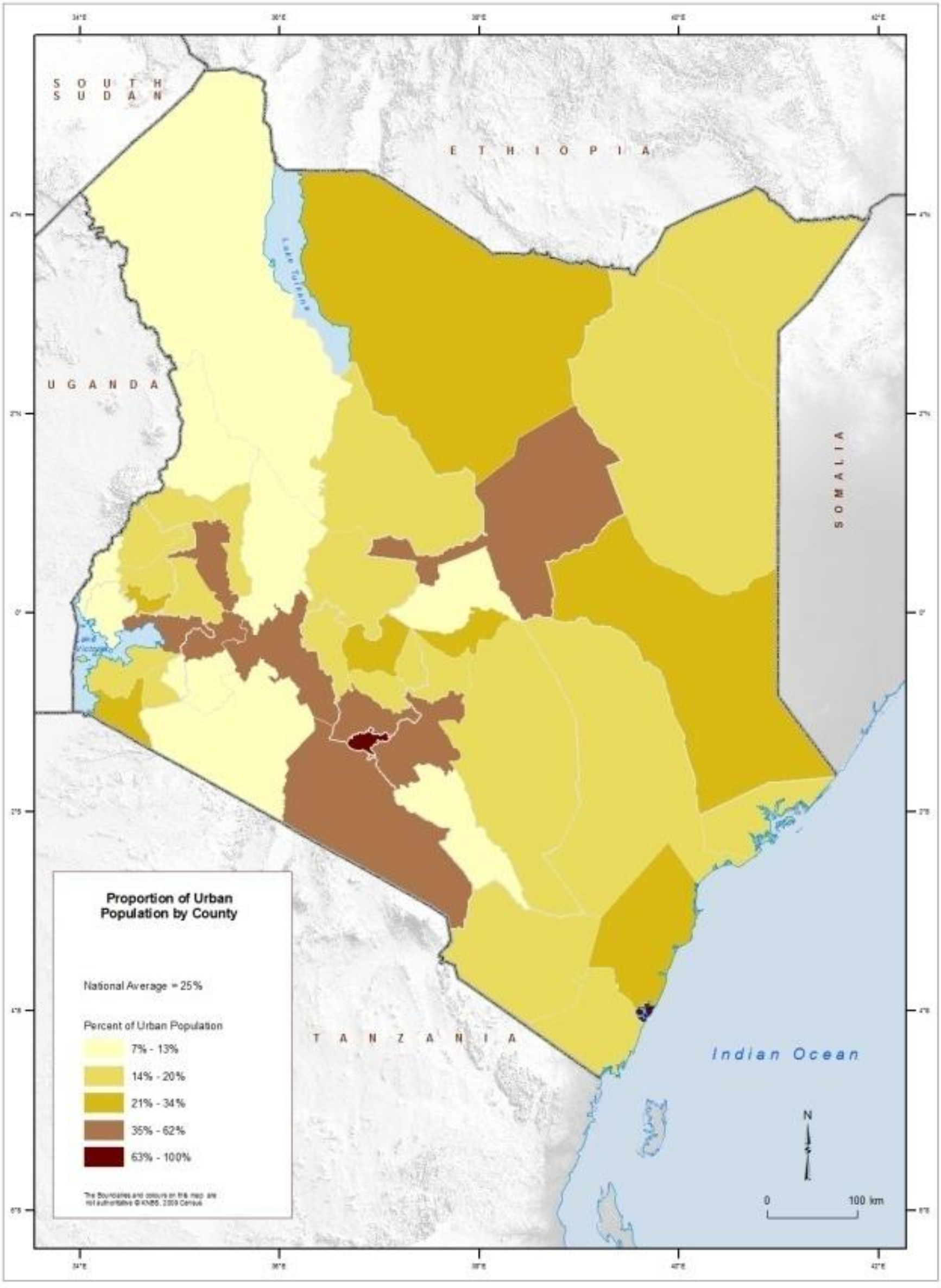
F.1: Proportion of Urban Population

Map F.1: B shows the proportion of urban population to the total population in each county. Following the provincial trends, the large majority of counties are relatively less urbanised. Only four counties – Nairobi, Mombasa, Kiambu, Machakos and Kisumu – have more than half of their population living in urban centres. Nairobi and Mombasa, which are at the same time the two largest cities in Kenya, are wholly urban. These four counties are followed by Nakuru (45 percent); Isiolo (44 percent); Kajiado (41 percent); Uasin Gishu (39 percent); Kericho (38 percent); Migori (34 percent); Vihiga (31 percent) and Kilifi (25 percent). The rest of the counties have less than one-quarter of their population living in urban areas. Meru, West Pokot and Narok are the least urbanised counties with less than 10 percent urban population. Maps F.1: A and B show the proportion of rural and urban population by county respectively. Map F.1 B further shows that counties of Siaya, Busia, Bomet, Makueni, Baringo, Turkana, Nyamira, Kitui, Nandi and Wajir had urban population ranging between 10 and 14 percent of their total population.

F. 1: A Proportion of Rural Population



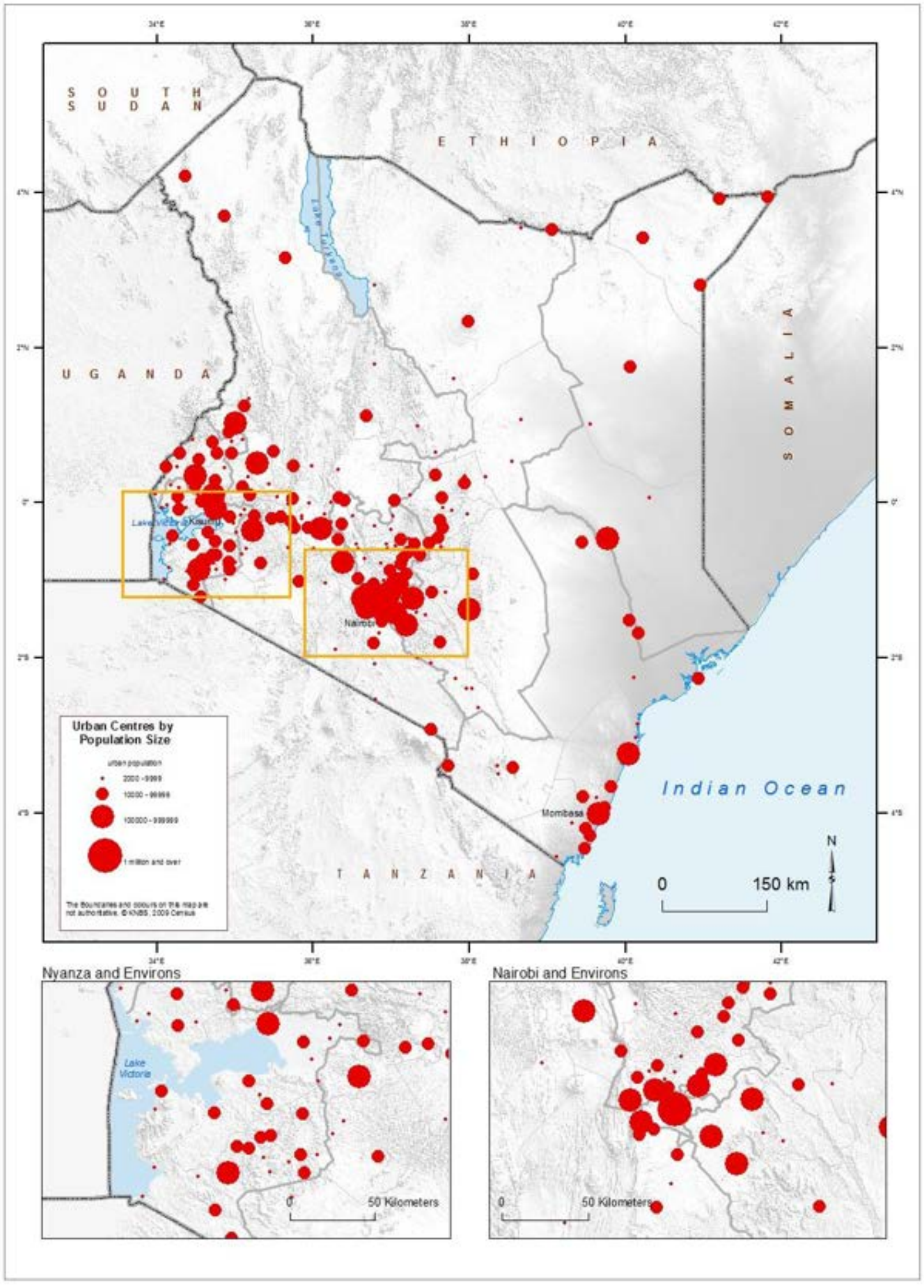
F.2: B Proportion of Urban Population



F.2: Spatial Distribution of Urban Centres by Population Size Category, 2009

Generally and regardless of size category, most of the urban centres in Kenya are concentrated in Central, Western, Nyanza, and lower parts of Eastern and Rift Valley Provinces. This reflects the historical and colonial influence of urbanisation process in Kenya. The location of administrative centres, the Kenya-Uganda railway, European large-scale commercial farming, caravan towns and missionary centres are some of the factors that influenced patterns of urbanisation during the colonial period. Urban centres with 100,000 and more people are notably the major urban centres in Kenya. Those with between 10,000 and 99,999 people are likely to be the major urban areas in the counties and they constituted about 97 centres. Centres that had between 100,000 and 999,999 population included Mumias, Ngong, Awendo Township, Kitui, Karuri Township, Garissa Municipality, Malindi Municipality, Nyeri Municipality, Vihiga Municipality, Kericho, Mavoko Municipality, Thika Municipality, Kitale, Naivasha, Kangundo – Tala, Ruiru Municipality, Kikuyu Township Eldoret, Nakuru, Kisumu City and Mombasa. Only Nairobi had a population of over 1 million (3.1 million). Map F.2:B depicts the distribution of urban centres and their population sizes. The inset maps are enlarged maps showing Nairobi and its Environs, and cities within the Nyanza Province environs.

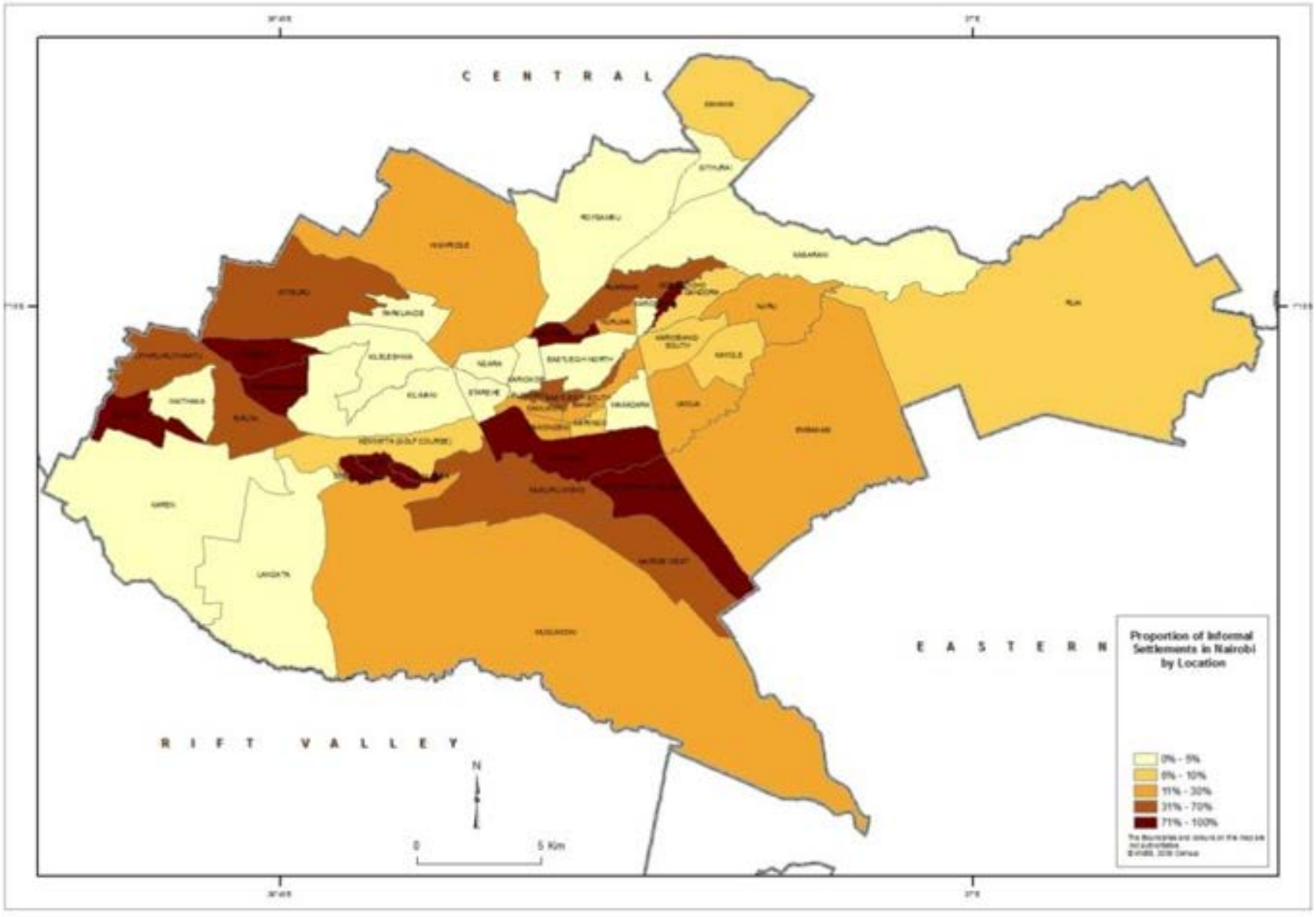
F.3: Spatial Distribution of Urban Centres by Population Size



F.3: Spatial Concentration of Informal Settlements Population in Nairobi, 2009

Nairobi has the largest share (62.4 percent) of the total informal settlements population in the country. It also houses the highest number of informal settlements, but only a few of them are widely known. These are Kibera, Mathare, Mukuru and Korogocho. However, given their character and nature, it is not easy to define the spatial contexts of these informal settlements. More often than not, the population of specific informal settlements in Nairobi and in other urban centres is generally based on estimations. Map F.3 presents the spatial concentration of informal settlements population in Nairobi by administrative locations. Korogocho is wholly an informal settlement, while Kawangware, Mukuru Kwa Njenga, Kibera, Laini Saba, Viwandani, Serangombe, Kangemi and Mathare have high concentrations of their population living in informal settlements, which ranged between 70 and 99 percent. Other areas with informal settlements comprising between 30 and 71 percent of their entire populations included Ruaraka, Nairobi West, Eastleigh South, Kitisuru, Riruta, Mukuru Nyayo, Uthiru- Ruthimitu and Pumwani. Notably, Makadara (in Makadara Division), Ngara, Starehe (in Central Division), Kileleshwa, Kilimani and Parklands (in Westlands Division) do not have informal settlements.

F.4: Spatial Concentration of Informal Settlements in Nairobi, 2009



Section G: Household and Family Dynamics

Households by Number of Special Population Groups

Households shelter individuals and facilitate consumption of various goods and services. The government has also initiated a number of programs on social exclusion particularly the vulnerable members of the society and hence it will be useful to obtain information on households that shelter such people. The following maps show the distribution of households that shelter vulnerable groups such as children, elderly, and orphans.

Slightly over half (54 percent) of households have no children while three percent have 3 or more children living in the households. Nairobi has the highest proportion of households with no children and North Eastern the lowest (42 percent). The distribution typically reflects the changing nature of fertility patterns. Regions with lower birth rates have higher proportion of households with no children. Counties in North Eastern Province have a large proportion of households with 3 or more children under the age of 5. Counties in Nyanza Province particularly Siaya, Kisumu, Migori and Homa-Bay tend to host more orphans. Nairobi and Counties in Western and Central households are less likely to host orphans.

G.1: Household headships

One of the ways of understanding the nature of the households is through the characteristics of the household head. The characteristics of the household head are associated with the household welfare. Patterns of headship are influenced by several factors such as changes in the roles of men and women

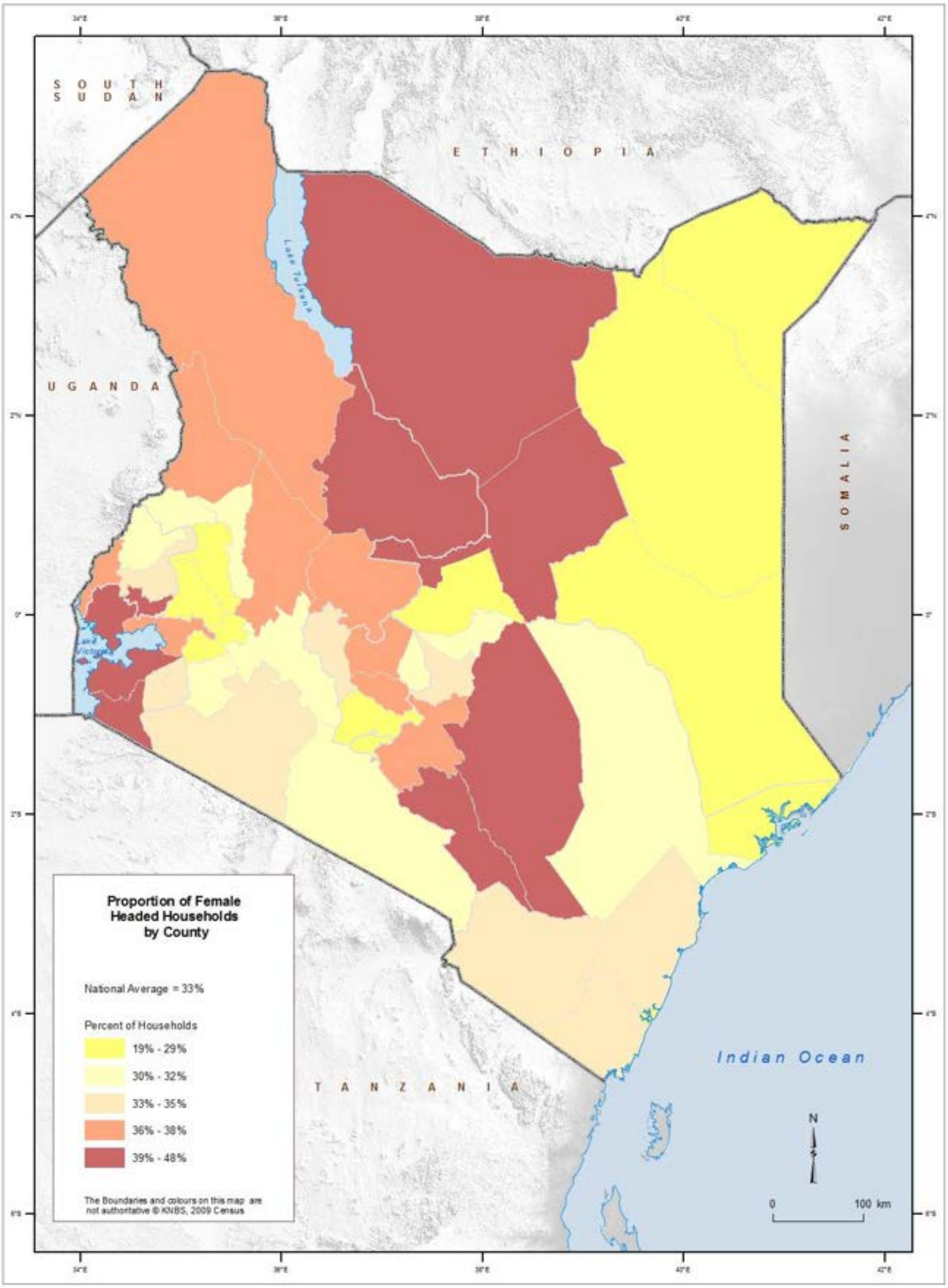
Proportion of female headed households by County

Female headship is most prevalent in counties of Siaya, Homa-Bay, Vihiga, Marsabit, Isiolo, Samburu, Kitui, Makueni and Migori with a prevalence rate falling in the range of 39.0 percent and 48.0 percent. Counties with proportion of female headed households falling in the range of 36.0 percent to 38.0 percent are Kisumu, Turkana, West Pokot, Baringo, Laikipia, Nyeri, Kirinyaga and Machakos. Counties of Mandera, Garissa, Wajir, Lamu, Meru, Nairobi, Kericho, Uasin Gishu and Nandi had the least proportion of households headed by female in the range of 19.0 percent and 29.0 percent. High proportion of female headed households may reflect several factors such high out-migration rate for men, high rates of widowhood or prevalence of polygamy. Spatial distribution of Female headed households by county is indicated in Map G.1: A.

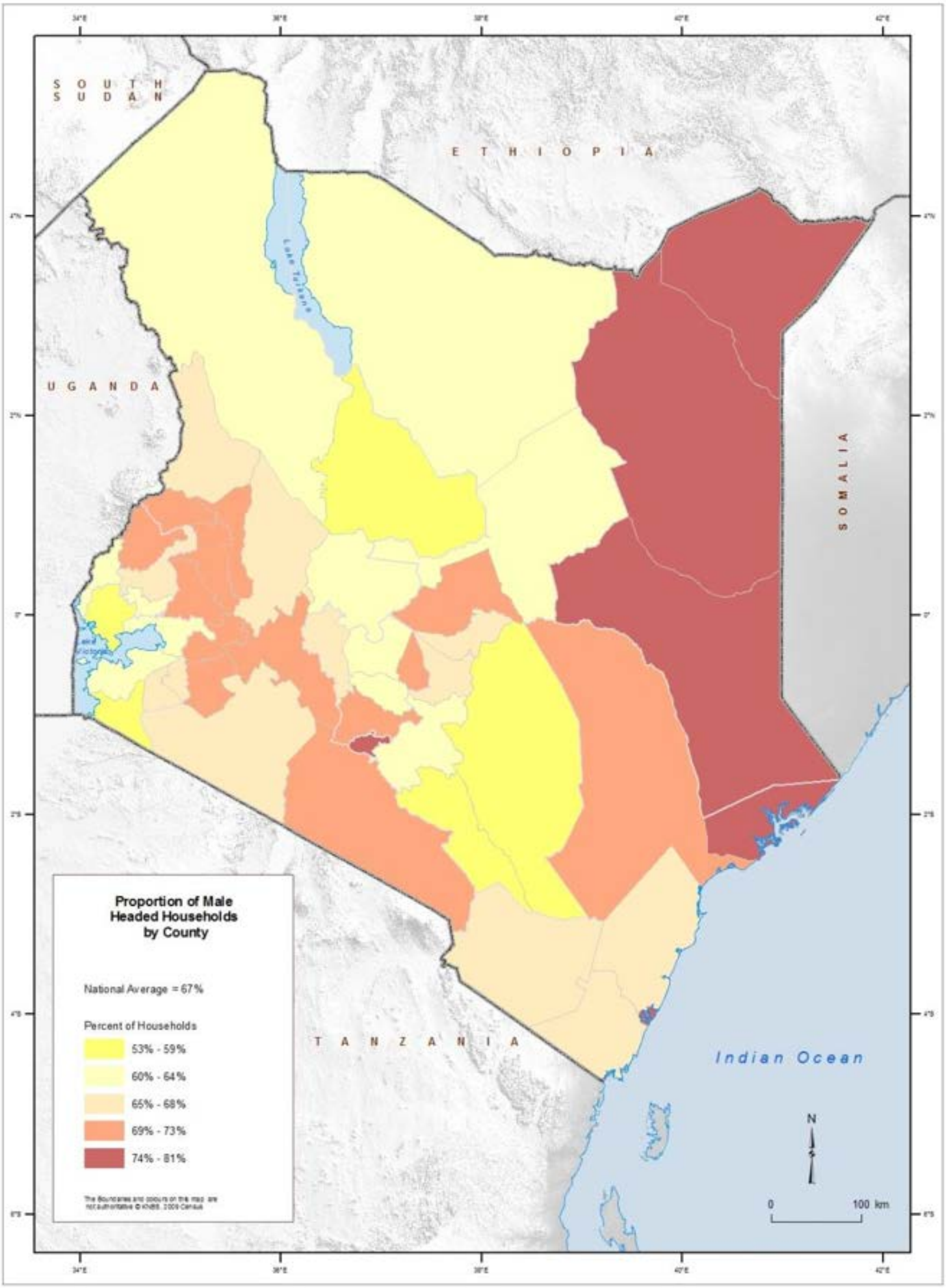
Proportion of male headed households by County

Males generally head about two thirds of the households. Men headship rates are generally low in counties around the lake region owing to high out-migration rates for men and prevalence of polygamy. The disparities in men headship rates by counties are depicted in Map **G.**1:**B.**

G.1: A.Proportion of Female headed households by County



G.2: B.Proportion of Male headed households by County



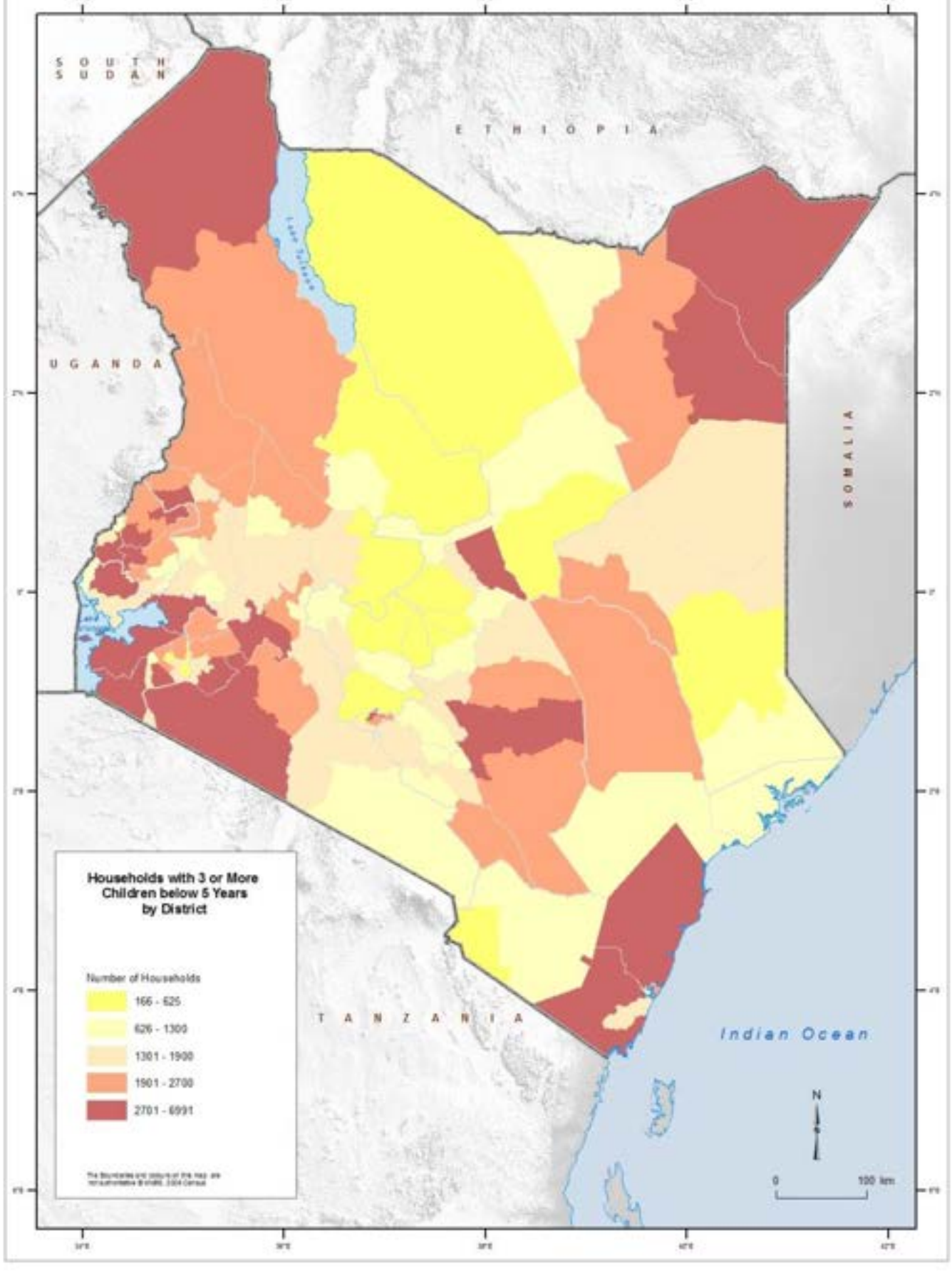
G.2: Households with 3 or more children under age 5 by district

Map G.2A presents the spatial distribution of households with 3 or more children under age 5 by district. Some districts in the counties of Narok, Turkana, Mandera, Wajir, Homa-Bay, Migori, Siaya, Bungoma, West Pokot, Machakos, Kilifi, Kwale and Isiolo had the highest number of households with 3 or more children below 5 years in the range of 1701 and 6991 households. The map also indicates that some districts within the counties of Marsabit, Samburu, Garissa, Laikipia, Taita Taveta, Nyandarua, Kiambu and Nyeri had less number of households with 3 or more children below 5 years in the range of 166 and 625 households. Households with 3 or more children under the age of 5 reflect existence of more than one woman of child bearing age or high fertility levels. The distribution typically reflects the changing nature of fertility patterns. Regions with lower birth rates have high number of households with 3 or more children.

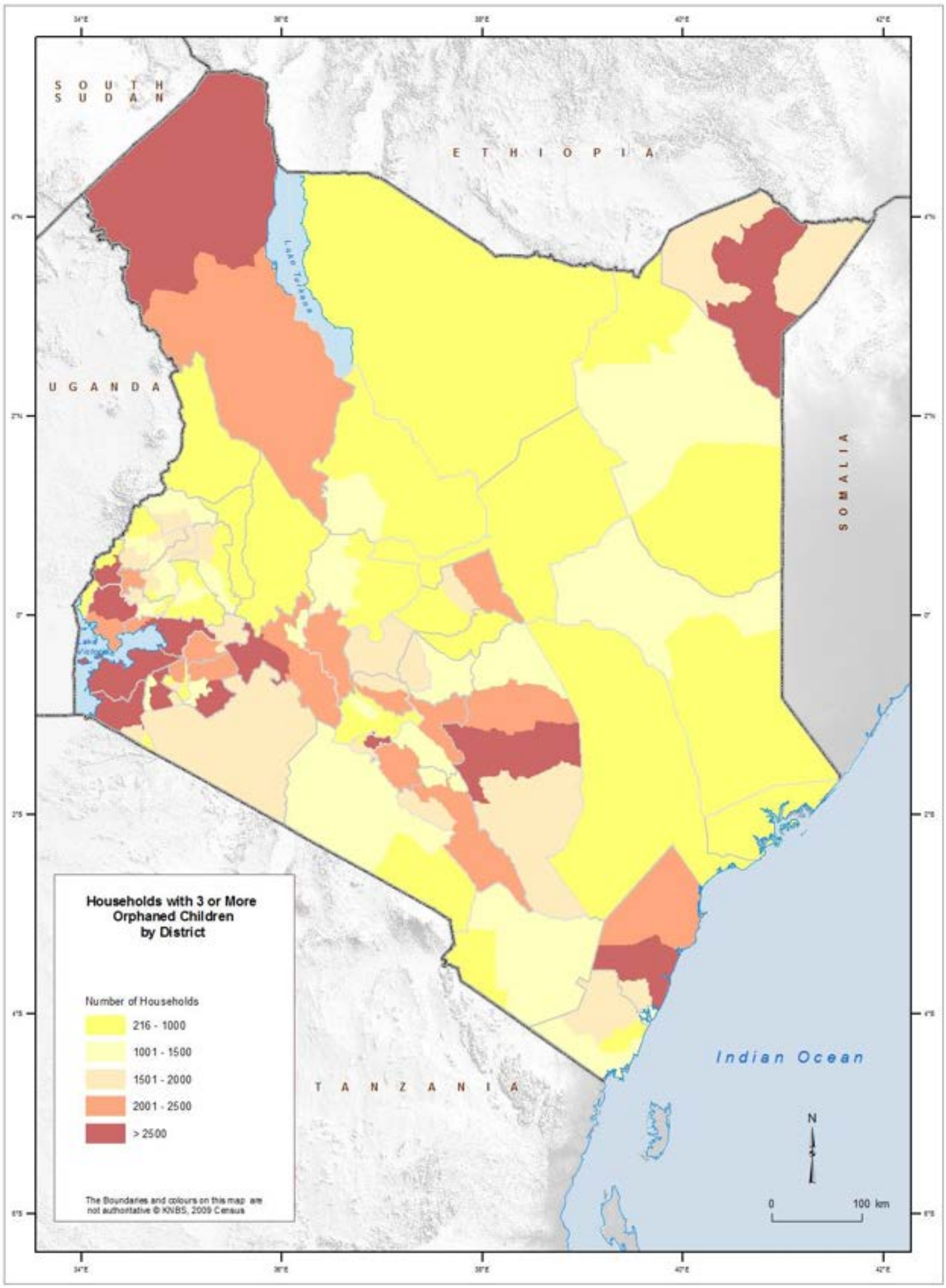
Households with 3 or more orphans by district

Households shelter individuals and facilitate consumption of various goods and services. Map G.2: B shows the distribution of households with 3 or more orphans by district. The districts with the highest number of households at greater than 2500 with 3 or more orphans are in the counties of Siaya, Kisumu, Homa-Bay, Turkana, Mandera, Kitui, Lamu, Bomet, Nakuru, Busia and Migori. Districts in the counties of Nairobi, Samburu, Marsabit, Garissa, Taita Taveta, West Pokot, Uasin Gishu, Elgeyo Marakwet, Nandi, Meru, Laikipia and Wajir had least number of households with 3 or more orphans in the range of 216 and 1000 households. The number of orphans in the households reflects the mortality patterns among adults.

G.3: A Households with 3 or more children under age 5 by District



G.2: B.Households with 3 or more orphans by District



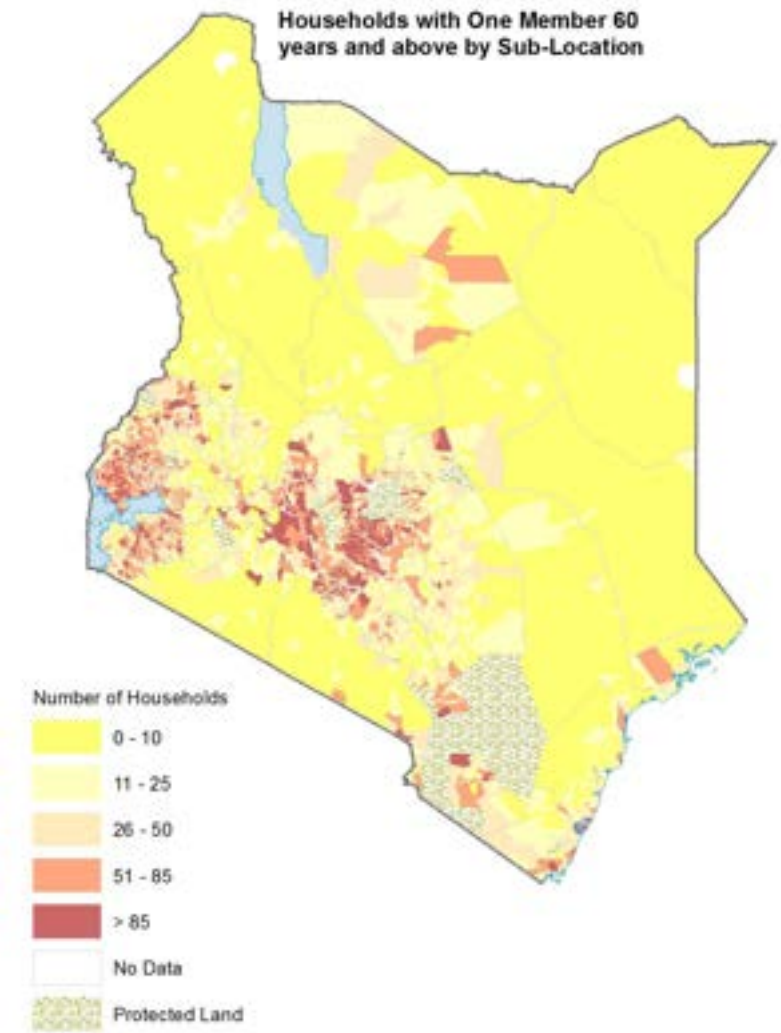
G.4: Households with at least one member 60 years and above

Households shelter individuals and facilitate consumption of various goods and services. The government has also initiated a number of programs on social exclusion particularly the vulnerable members of the society. The monograph on Housing and Social Amenities for the 2009 Census indicates that nearly 1 in every 5 households has at least one elderly person.

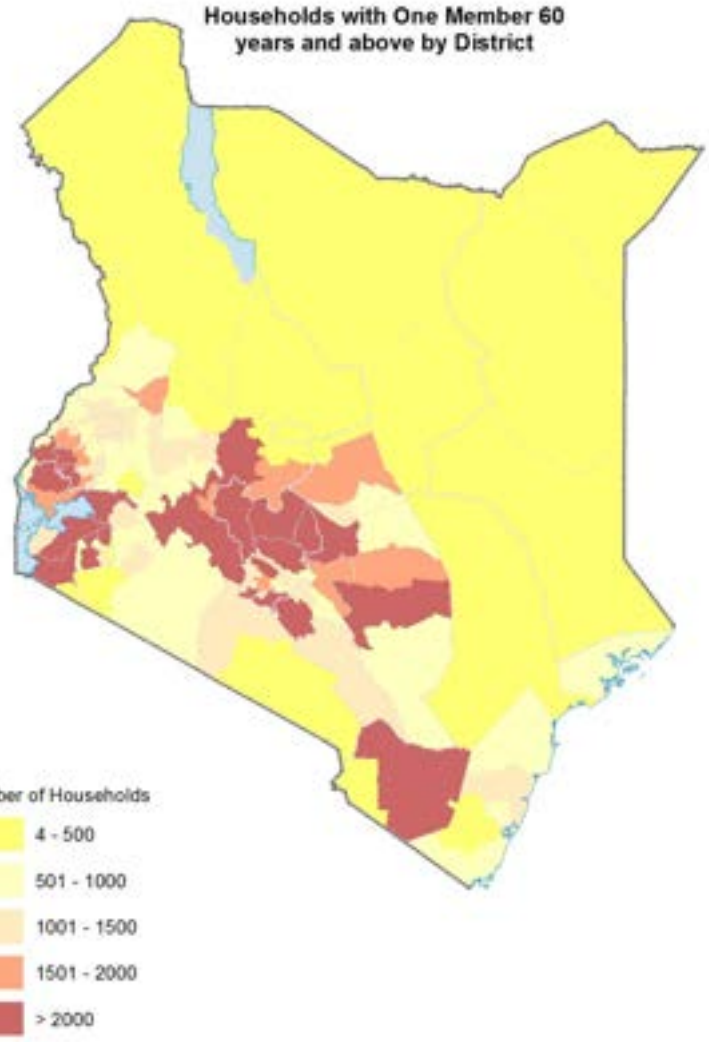
Maps G.3: A and B show the distribution of households with one member 60 years and above by sub-location and district respectively. The distribution of this segment of the population by sex, district and sub-location is indicated in Maps G.3: C, D, E and F respectively. Districts and sub-locations in the counties of Turkana, Samburu, Mandera, Wajir, Marsabit, Garissa, Kwale, Lamu, Tana River, Kajiado, Nandi and Narok had fewer households with one member aged 60 and above. Counties comprising of districts and sub-locations with high number of households with one member aged 60 and above are Nairobi, Kiambu, Muranga, Kisumu, Siaya, Taita Taveta, Nyeri, Nyandarua, Baringo, Nakuru and Tharaka Nithi. High number of households with elderly population indicates areas with greater life expectancy. The spatial distribution of the households with one or more elderly person aged 60 and above for both female and male follow similar pattern described for the counties in this section.

G.5: A, B , C, D, E, and F Households with one member 60 years and above by Sex, Sub-location and District

G.3:A



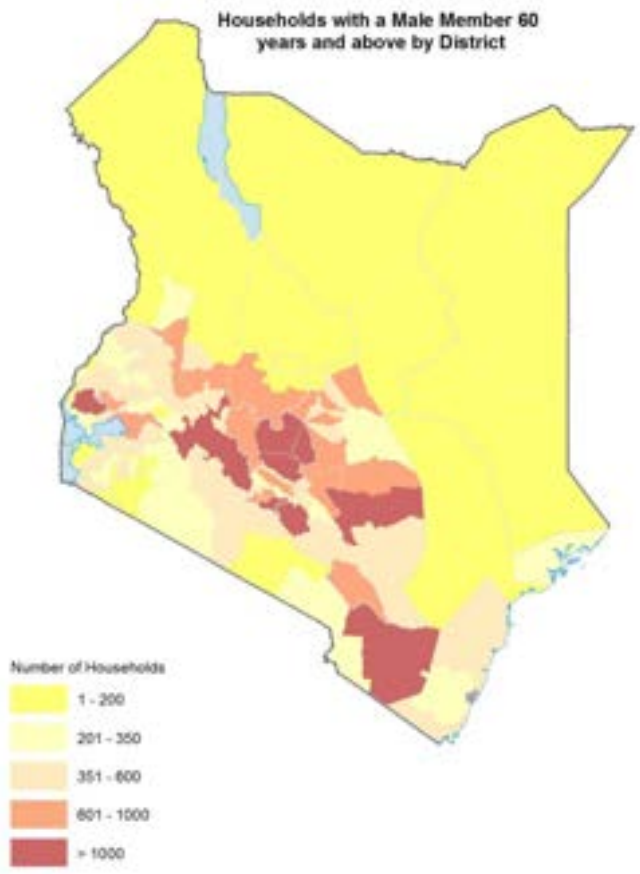
G.3:B



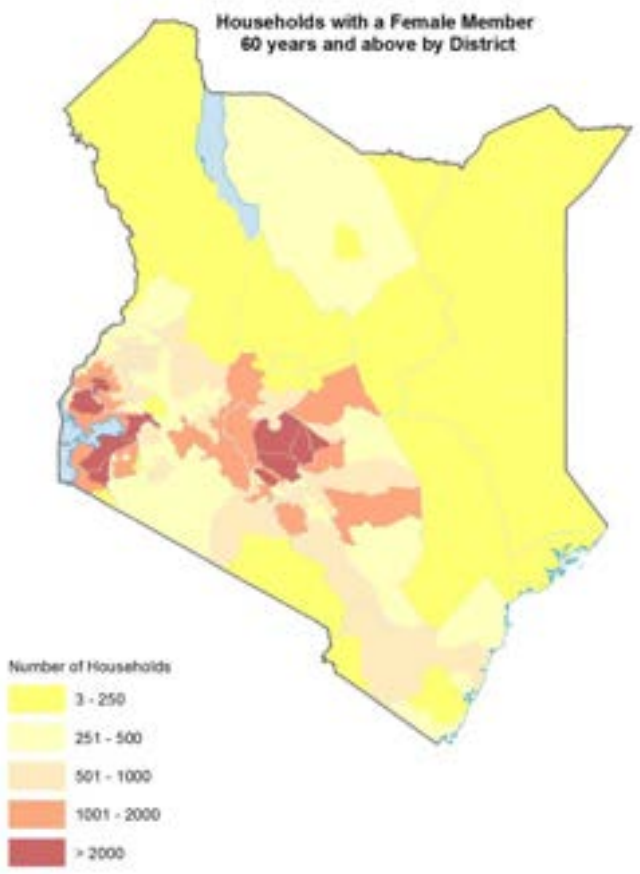


The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

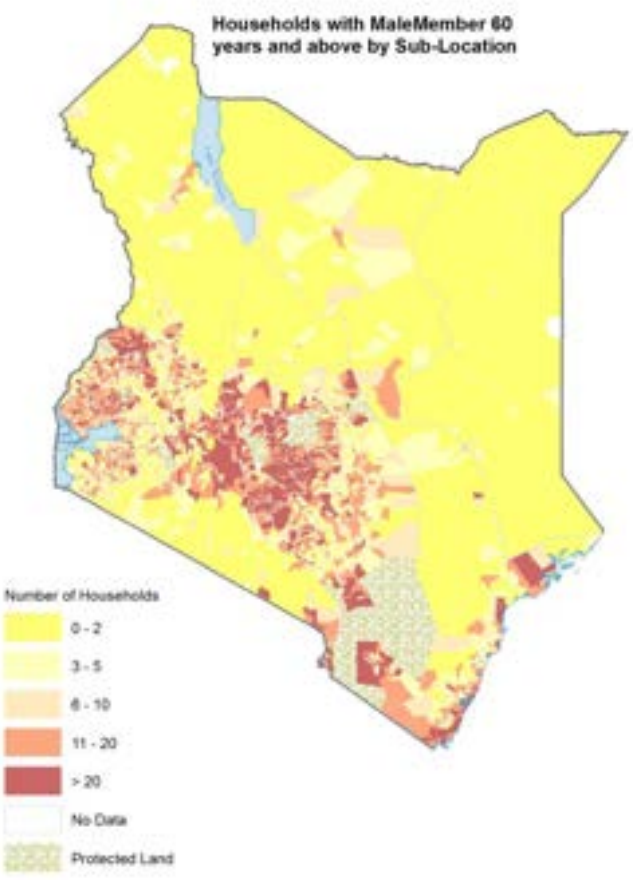
G.3: C



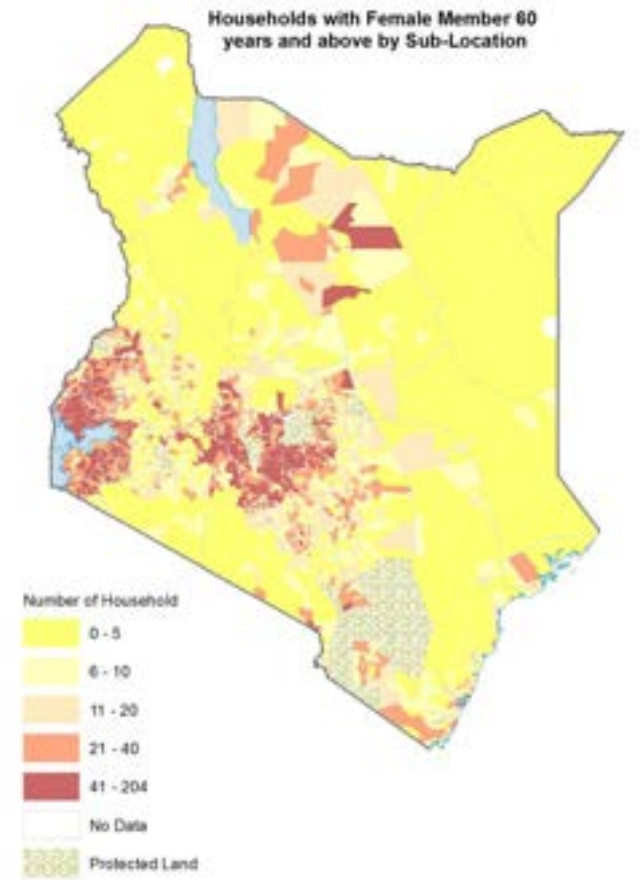
G.3: D.

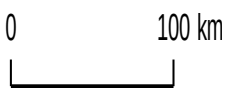


G.3: E.H



G.3: F.





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G.4: Old Age dependency

As a country undergoes demographic transition, its age structure also change. One of the critical changes is the increase of elderly population. Although the proportion of the elderly has remained at just 5.0 percent since 1969, the absolute numbers is rapidly growing. The absolute size of the elderly has some implications on the socio – economic status of a country. Two indicators are useful for describing the extent to which the older persons in a population depend on the working population. These are the potential support ratio and parent support ratio.

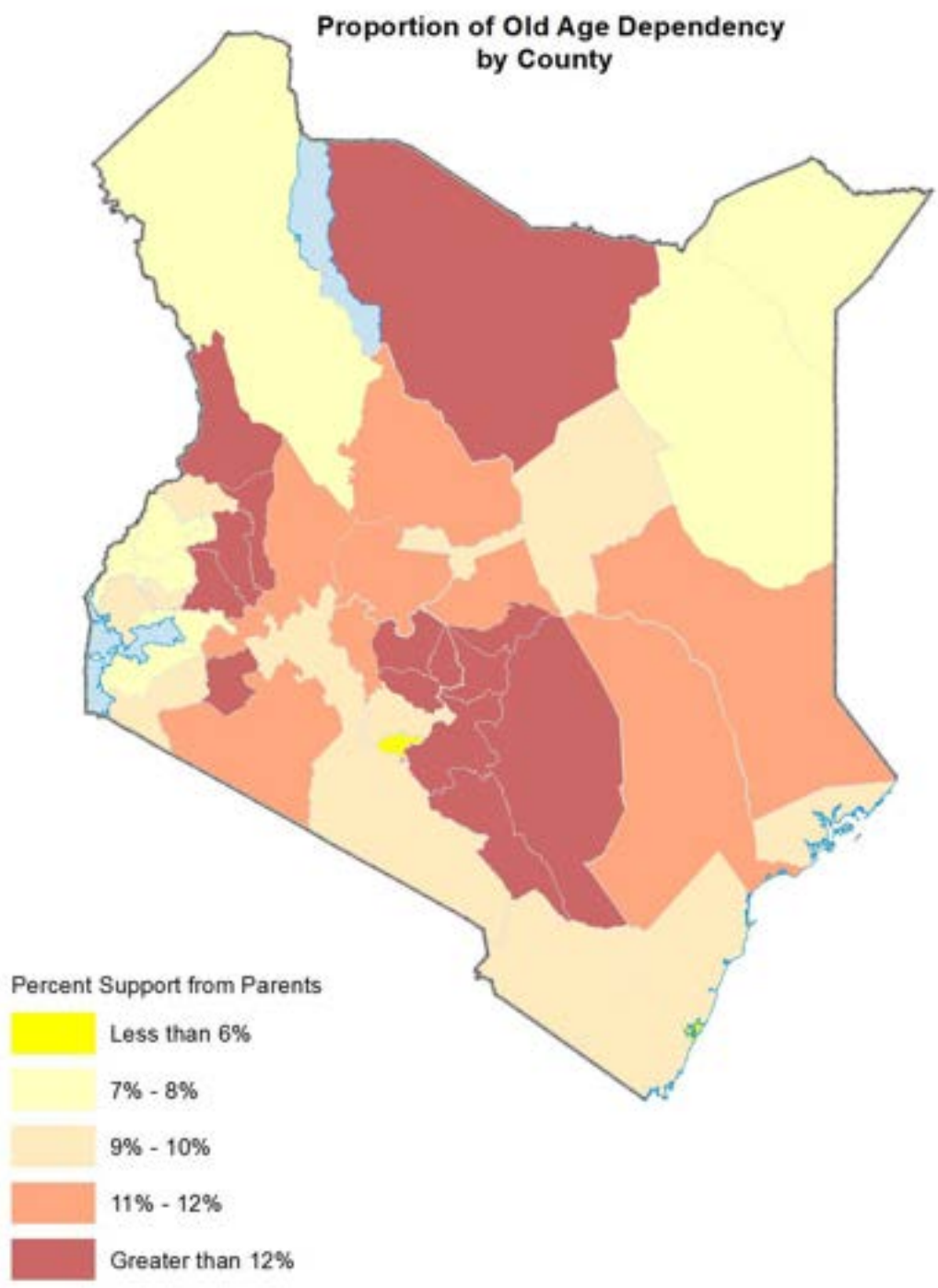
Parent Support Ratio

Map G.4: A shows Parent support ratio by county. Parent support ratio is the number of persons aged 85 and above to number aged 50-64 expressed per 100 persons. The measure is commonly used to assess the demands on families to provide support for the oldest members of the society. Parent support ratio is only a rough indicator of changes expected in the family support system. Globally the ratio rose from about 2 persons aged 85 and over per 100 persons aged 50-64 in 1950 to about 4.5 in 2007. In Kenya there are about 10.0 persons aged 85 and over per 100 persons aged 50-64. Counties with highest proportion greater than 12.0 percent of parent support ratio are Kitui, Marsabit, Machakos, Makueni, Embu, Tharaka Nithi, Nyeri, Muranga, Bomet, Nandi, Uasin Gishu, West Pokot and Trans Nzoia. Nairobi and Mombasa counties had less than 6.0 percent parent support ratio. The parent support ratio varies across the counties as shown on Map G.4:A.

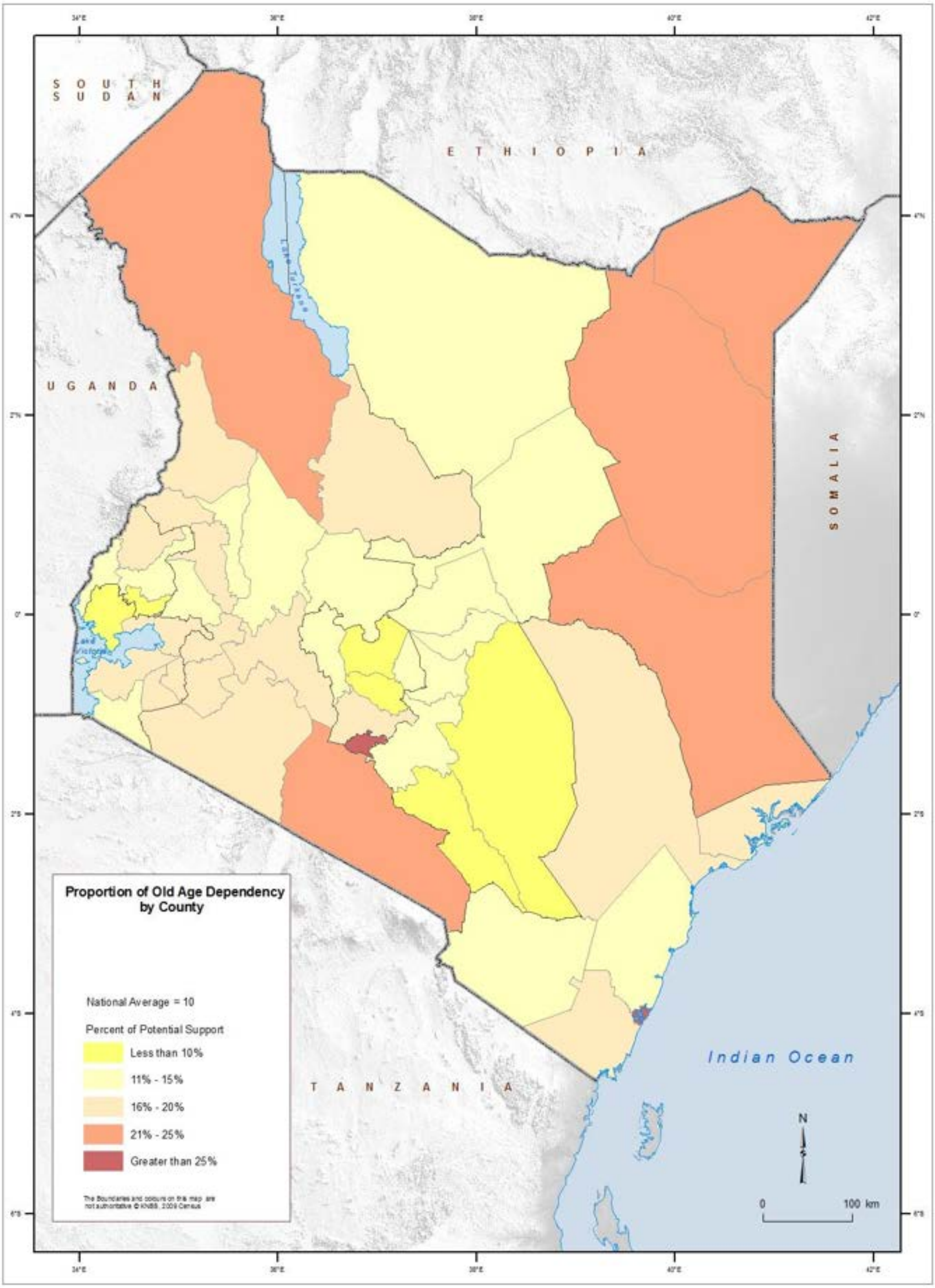
Potential Support Ratio

Map G.4: B depicts potential support ratio by county. Potential support ratio is the alternative way of expressing old age dependency. It is simply stated as the number of persons in the working age group 15-64 per person aged 65 and above. Worldwide this ratio has dropped from 11.6 in 1950 to about 8.7 in 2007. In Kenya, there are about 16 persons aged 15-64 per person aged 65 and over. Counties with less than 10.0 percent potential support ration are Siaya, Vihiga, Kitui, Makueni, Nyeri and Muranga. Nairobi County had the highest potential support ratio at greater than 25.0 percent. The potential support ratio was also high in the counties of Mandera, Wajir, Garissa, Turkana and Kajiado in the range of 21.0 percent and 25.0 percent.

G.4: A.Proportion of Old Age Dependency by County (Parent Support Ratio)



G.6: B Proportion of Old Age Dependency by County (Potential Support Ratio)



Section H: Housing

Introduction

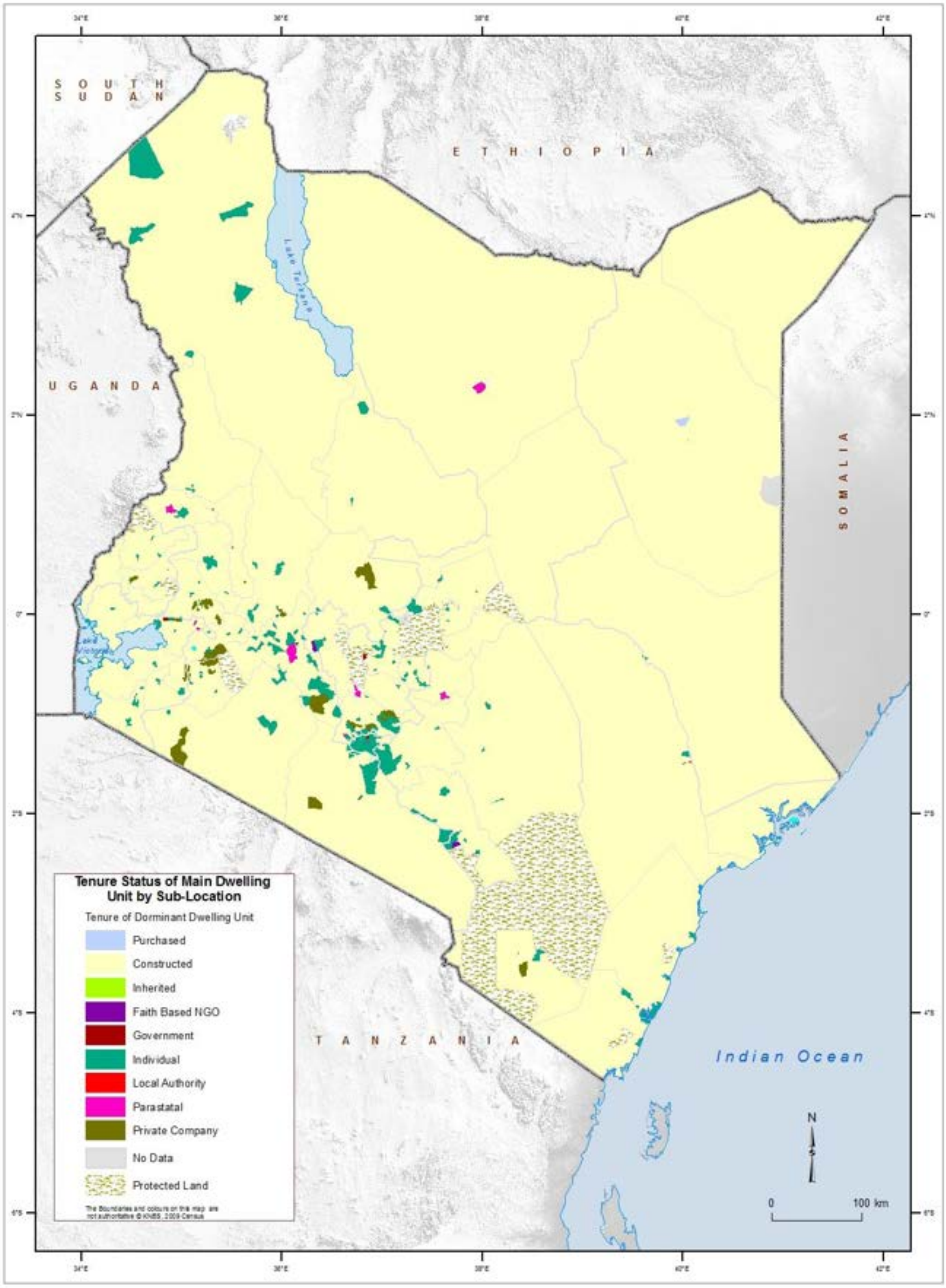
Housing in its comprehensive meaning is the processes and outcomes of the production (construction) and consumption (use) of residential (living) shelters. It includes the physical product, the process that yields the product and the socio-cultural and environmental circumstances in which the product is developed, delivered and used. It also involves the process of analysing the shelter needs of society, organizing the resources and facilitating society to access shelter that is adequate, affordable, functional and environmentally sustainable.

To effectively analyse the shelter needs of the society and inform policy and programme interventions, information and data is paramount. More specifically since in some instances, the housing situation and associated needs sometimes depict regional disparity, the interventions required should always be alive to this evidence. Representation of housing data in maps is therefore one of the tools that assist in isolating housing needs that has geographical inclinations.

H.1: Tenure Status of Main Dwelling Unit by Sub- Location

The tenure is divided into owned and renting the household owning their dwelling are further subdivided according to the purchased constructed or inherited those dwelling are further in subdivided according to whether they rent from Faith Based or Non Government Organizations, government, individual, local authority parastatal or private company . Map H.1:A on tenure status of main dwelling unit by sub-location shows that ownership of self constructed dwellings is the predominant tenure type for most sub – locations in Kenya. Purchased

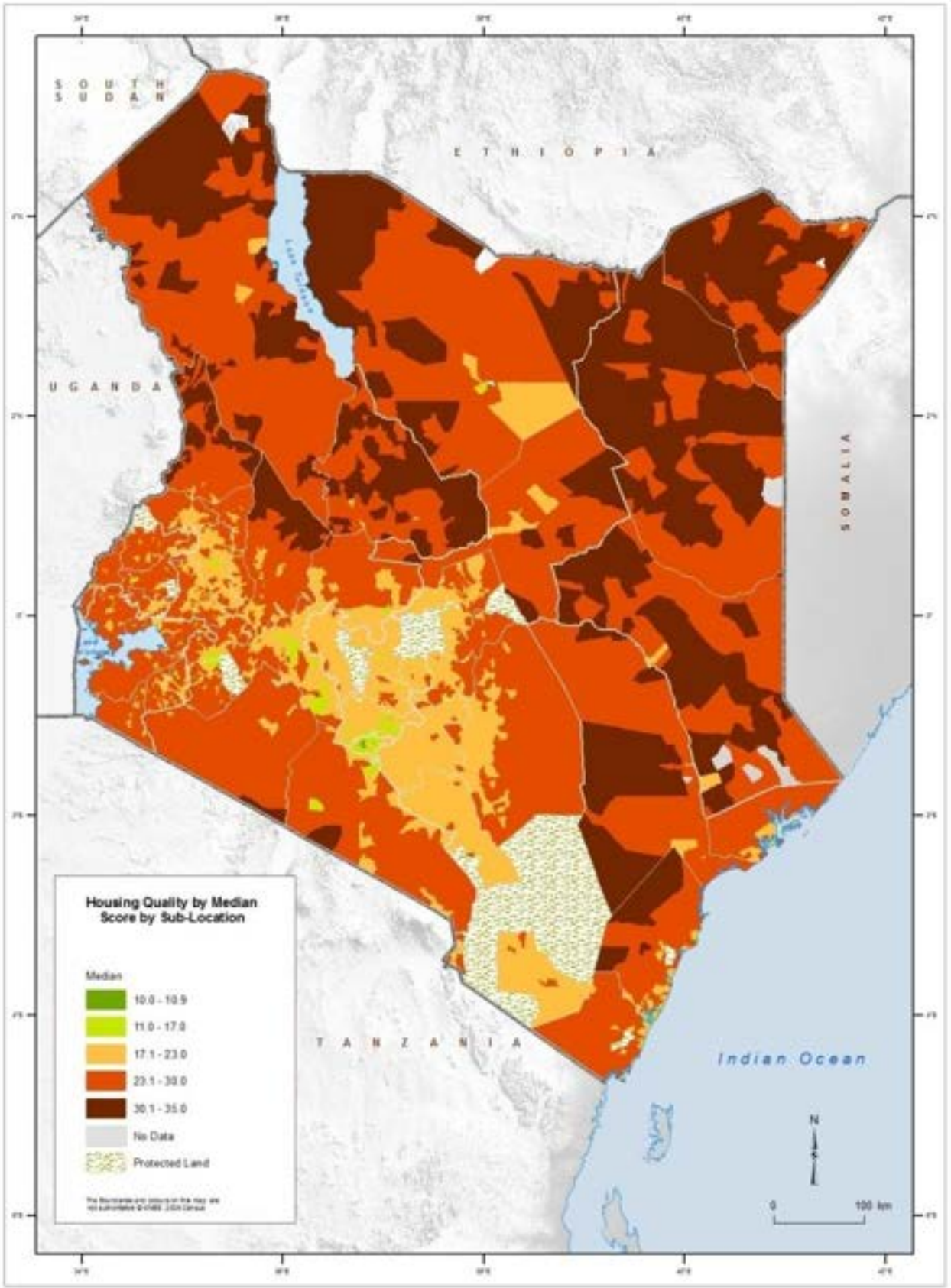
H.1: A Tenure Status of Main Dwelling Unit by Sub-location



H.2: Proportion of Households with Good Quality Housing by County

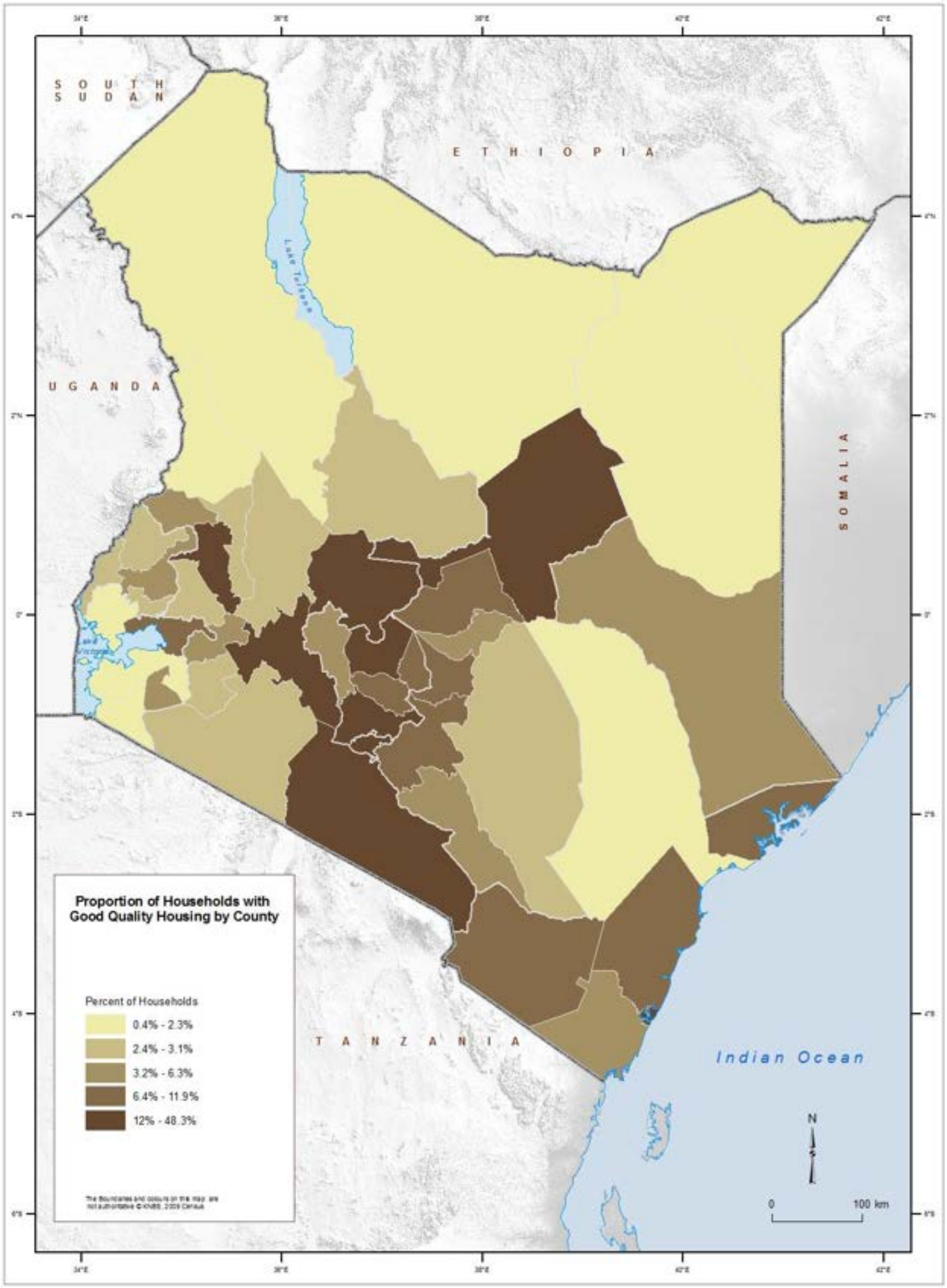
Housing quality is constructed in the analysis depicted here is a composite index including the physical attributes such as wall, floor and roofing materials, the levels of congestion represented by number of persons per room and the access and connectivity to basic services including sewer, water as well as lighting and cooking fuels. From this composite housing quality index, the country displays a picture that is somewhat congruent to the geographical regions of the country with the arid and semi-arid regions depicting generally poorer housing quality compared to the other regions. The regions around Nairobi, central province and southern rift valley where there is the highest concentration of urban centers depicts the best housing quality represented by a median quality score[10] of 17 and below. Map H.2:A shows spatial distribution of housing quality by median score by sub location where darker green hue displays areas with best housing quality, while dark brown indicates sub locations with poorest housing quality. Map H.2: B shows distribution of proportion of households with good quality housing by county. The following counties recorded 12 percent to 48.3 percent of their households as having good quality housing: Nairobi; Kajiado; Kiambu; Nakuru; Nyeri; Laikipia; Uasin Gishu and Isiolo. Siaya; Migori; Homa-Bay; Nyamira; Turkana; Tana River; Marsabit; Mandera and Wajir had less than 2.4 percent of households with good quality housing.

H.2: A Housing Quality by Median Score by Sub location



[10] Please refer to the Housing Monograph for details on the Consolidated Housing Quality Index and the attendant quality scores

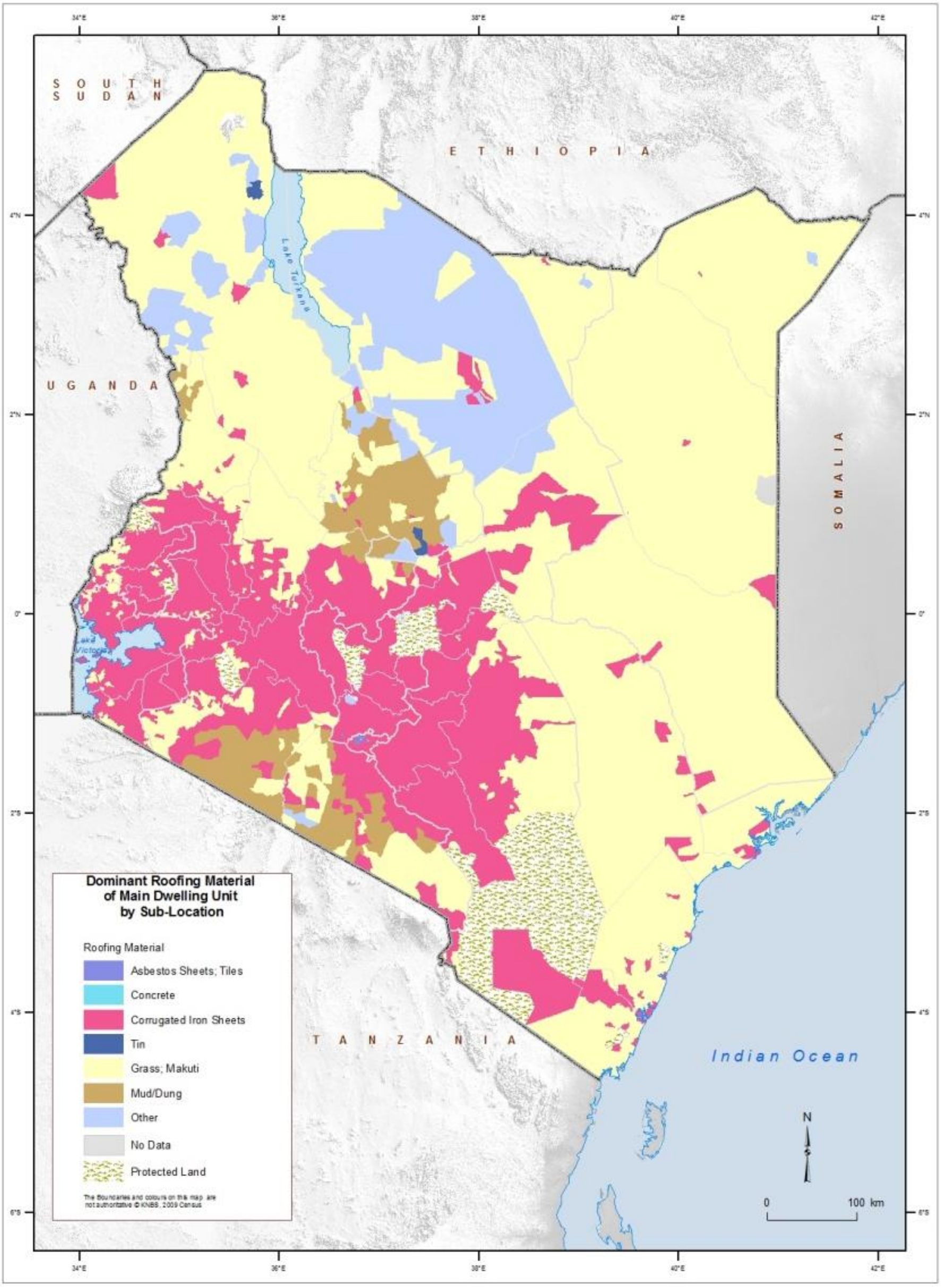
H.2: B Proportion of Households with Good Quality Housing by County



H.3: Dominant Roofing Material of Main Unit By Sub location

Map H.1: A shows the dominant roofing material of main dwelling unit by sub location. It indicates that grass /makuti is the most dominant roofing material in arid and semi- arid areas of the country mainly occupied by pastoralist communities. As is clearly depicted in the map, these areas constitute the entire North Eastern province, most of the coast, and the northern parts of Eastern and Rift Valley provinces. It is important to notice the relationship between the general climatic conditions prevailing in these areas as well as the nomadic nature of the communities living in these areas on the one hand and the prevalent type of roofing material on the other hand. As a result this situation may be as a result of the perceived appropriateness of makuti/grass as a roofing material in hot environments and also the ease with which it is easy for these nomadic communities to construct the roof of their dwellings. From the data as presented by the map, it is evident that in the rest of Kenya, corrugated iron sheet is the most predominant roofing material in all the counties in Central, Eastern, Nyanza, Nairobi and Western provinces. In coast Province, it is predominantly used in the county of Taita Taveta while in Rift Valley Province, corrugated iron sheets are mainly used in the counties of Nandi, Uasin Gishu, Kericho, Nakuru, Laikipia, Bomet, Trans Nzoia, Baringo, and Elgeyo Marakwet. However, it is evident that mud and dung is the predominant roofing material in areas occupied by Maasai and Samburu communities.

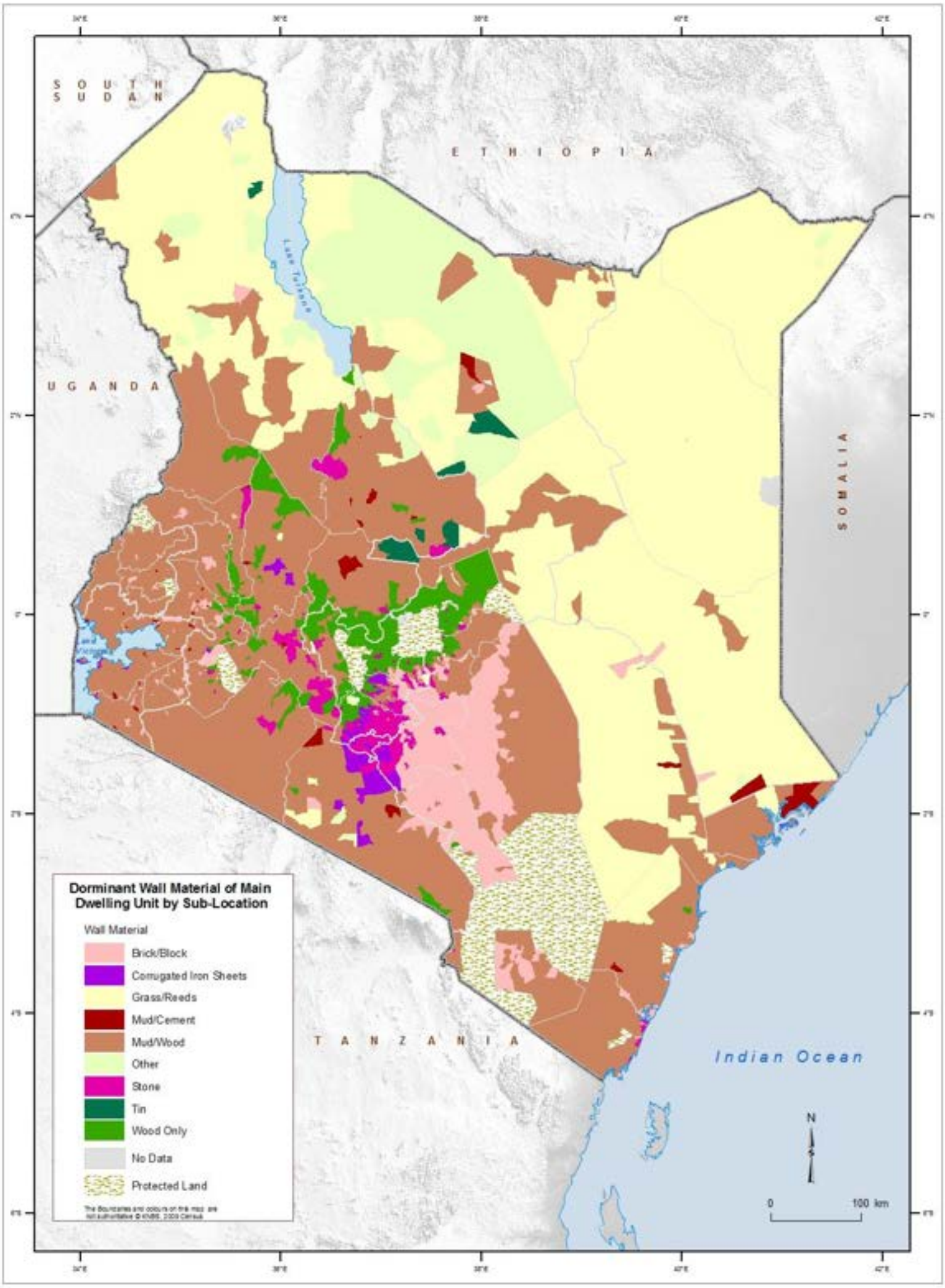
H.2: A Dominant Roofing Material of Main Dwelling Unit by Sub-location



H.4: Dominant Wall Material of Main Dwelling Unit by Sub location

Map H.5: A shows the dominant wall material of main dwelling unit by sub location. The map indicates that grass and reeds are the predominant wall material in the pastoralist areas such as the northeastern, upper eastern and north rift regions. Interestingly, mud and wood is noticeable from the map as the main wall materials in most parts of the country except in the arid and semi-arid areas and some section of the central parts of the country where there are traces of wood as the main wall material. From the results depicted by the map, it is evident that the type of wall material is closely related to geographical as well as socio-cultural characteristics of the regions.

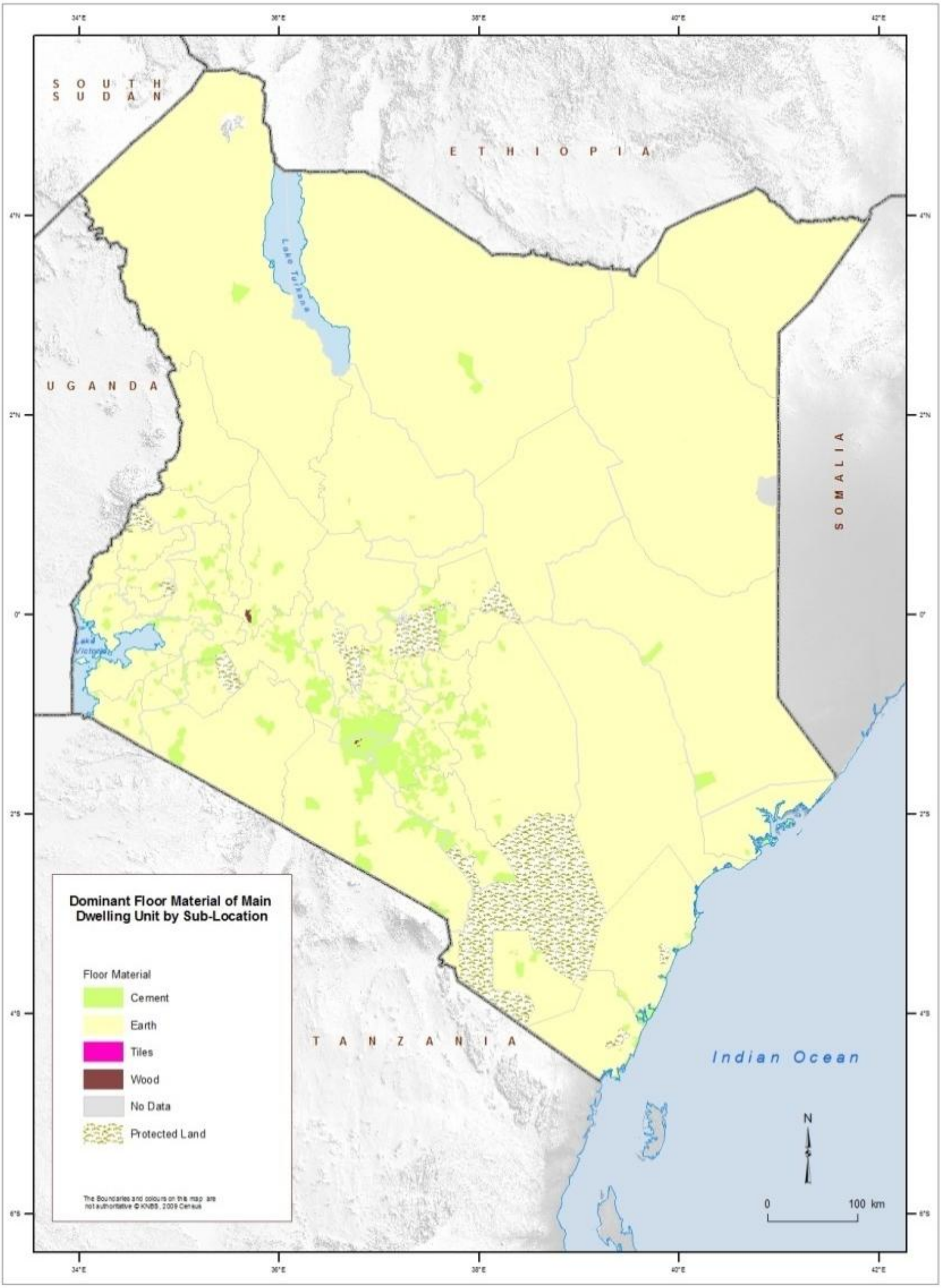
H.3: A Dominant Wall Material of Main Dwelling Unit by Sub location



H.5: Dominant Floor Material of Main Dwelling Unit by Sub location

Map H.6: A presents the dominant floor material of main dwelling unit by sub location. It shows that households in Kenya dwell mainly in houses with earth floor however there are significant pockets of regions where cemented floors are dominant especially within Nairobi and surrounding region and in sub-locations falling within urban centers. This is predictable since most of the urban centers of Kenya are concentrated at the lower central and western regions of the country. It is interesting that this is the only result compared to wall and roofing materials which does not depict any congruence with some known geographical, socio-cultural or economic factors.

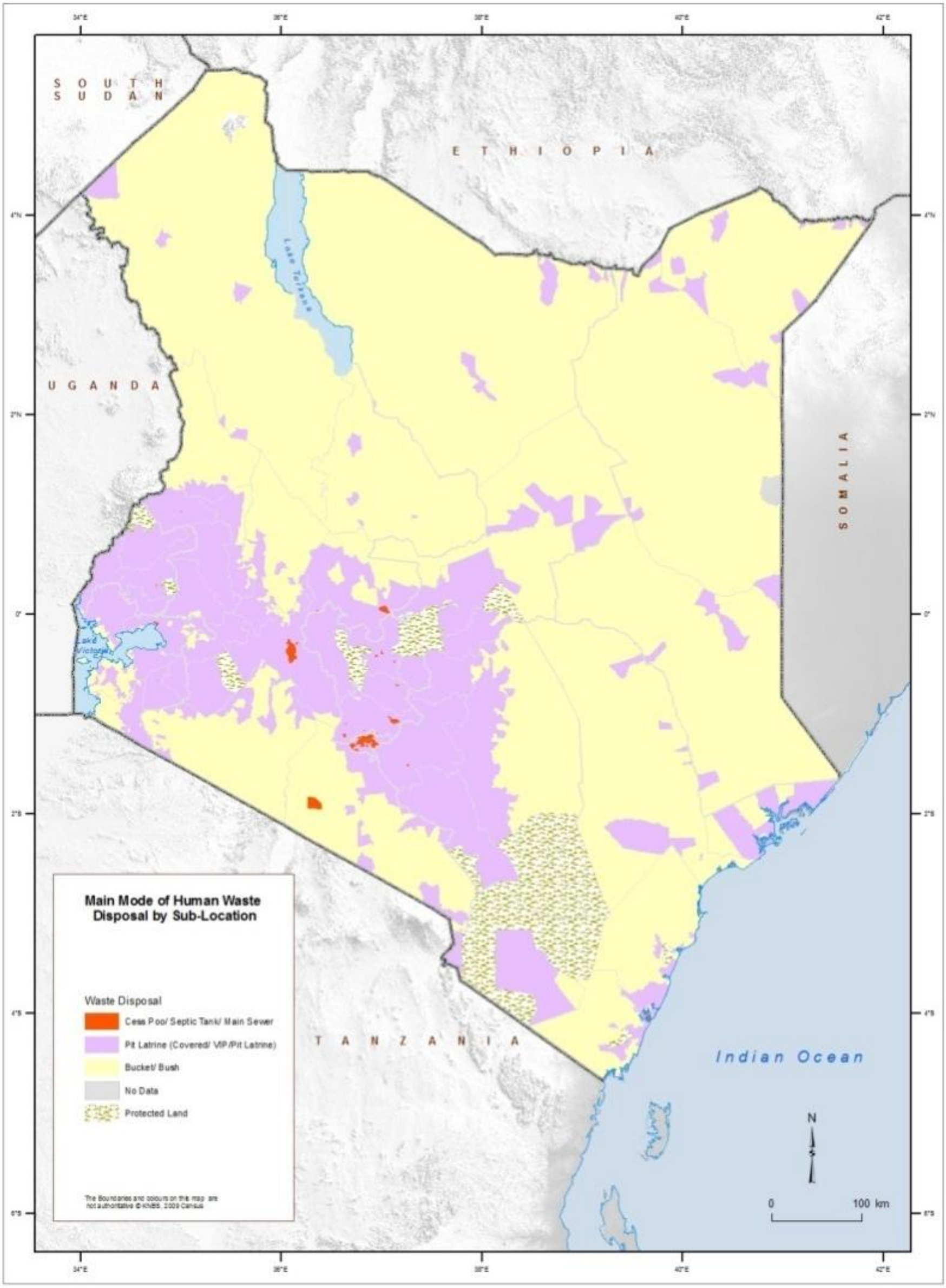
H 4: A Dominant Floor Material of Main Dwelling Unit by Sub-location



H.6: Main Mode of Human Waste Disposal

The results depicted in map H.7 indicate the main mode of human waste disposal by sub location. The map shows that bucket/bush is the predominant mode of human waste disposal for households in most regions of Kenya particularly in the arid and semi-arid areas. Some of the non semi arid or arid areas with some sub-locations having bucket/bush as the predominant mode of human waste disposal for the households are in the counties of Migori, Siaya, Narok, Kajiado, Kakamega, Nandi and Nakuru. Pit latrines are the next most predominant mode of human waste disposal mainly in the sub-locations falling within central and western regions of the country. It is however noteworthy mentioning that Pit latrines, although one of the cheapest yet safer means of human waste disposal, may not be appropriate in some areas with porous subsoil frameworks as is the case in areas like the north eastern. Yet the more appropriate mode like the sewer is comparatively expensive. As a result of natural conditions and costs, there are only a few pockets of counties where safe and decent modes of disposal including main sewer, septic tank and cesspool are dominant especially in Nairobi, Kajiado, Nakuru, Kiambu and Laikipia.

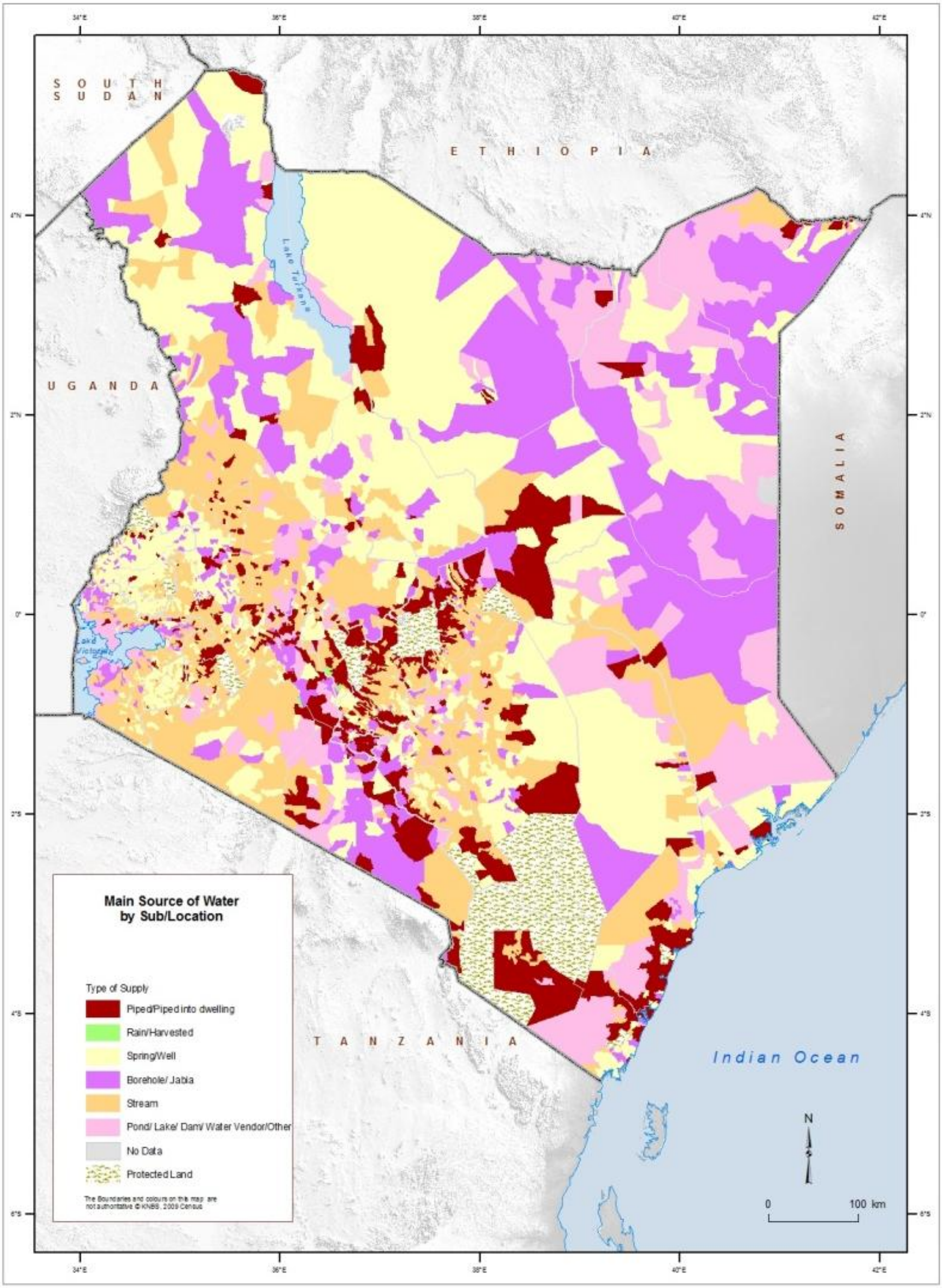
H.5: A Main Mode of Human Waste Disposal by Sub-location



H.7: Main Source of Water by Sub location

Map H.8: A shows that the main source of water by sub-location reflects a mosaic of sources. It indicates that all sources can be found in all spatial regions making it difficult to discern any trends. This is intriguing since the predominant source of water is often influenced by a combination of dynamics but mainly geographical and cost factors. For instance, it is unimaginable to expect that residents very far from a river or lake would report a river/lake as their main source of water. Also since installing piped water in a community is an expensive venture, it is not common for poverty stricken areas to report piped water a s their main source of water unless there has been interventions by state or none-state actors in that regard. At least every county has a sub-location with access to piped water and a spring/well as the main source of water.

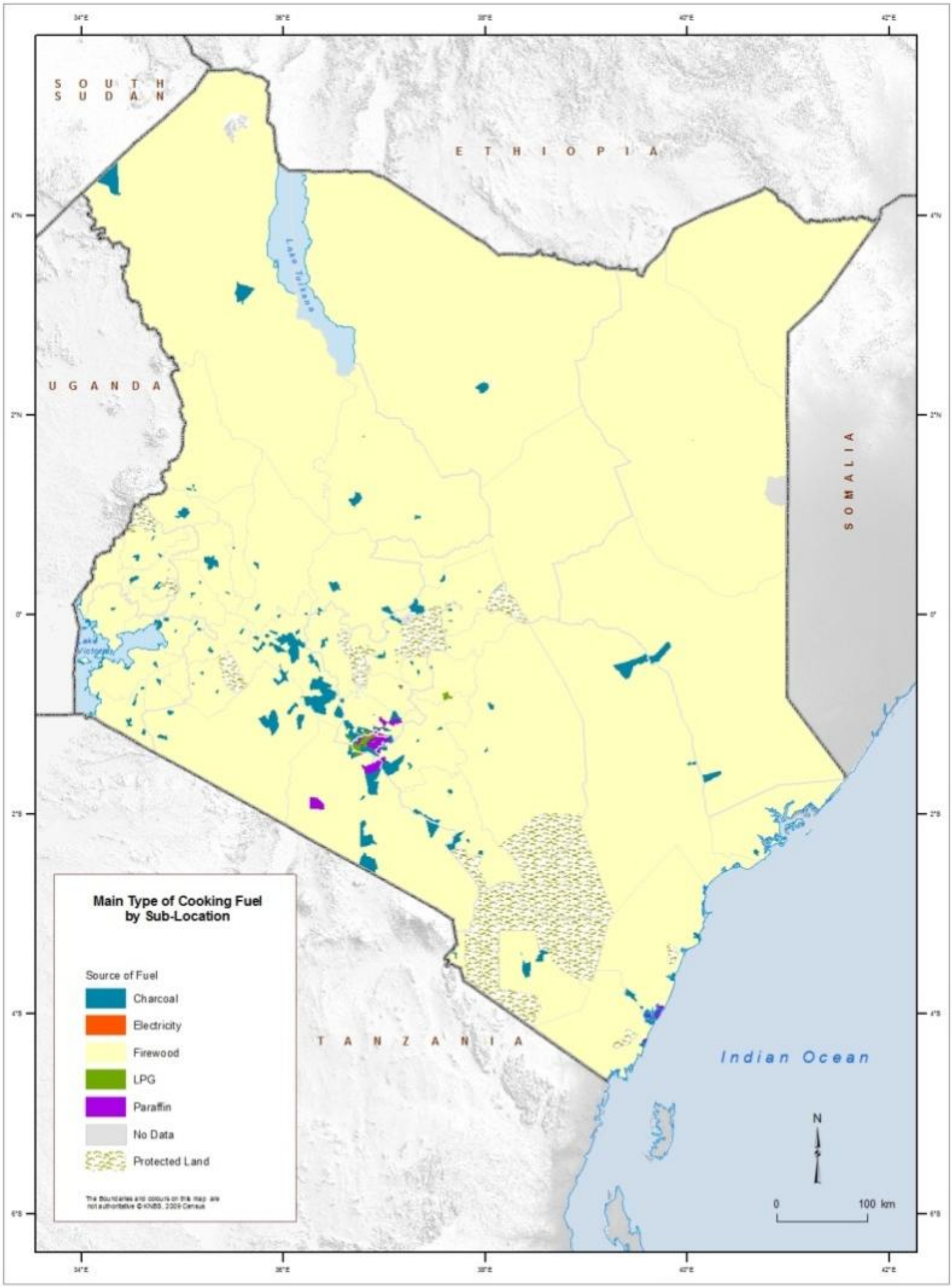
H.6: A Main Source of Water by Sub location



H.8: Main Source of Cooking Fuel by Sub location

Map H.9:A presents the main source of cooking fuel households uses by sub location. The map indicates that firewood is the main type of cooking fuel used by households in Kenya with a few pockets of charcoal traceable in the central and western regions of the country. From the results, it is evident that use of LPG and paraffin is mainly predominant in the sub-locations falling under the counties of Nairobi and Mombasa which are manifestly large urban areas of Kenya. This is expected since these are some of the relatively expensive cooking fuels to a majority although much friendlier to indoor health and the environment.

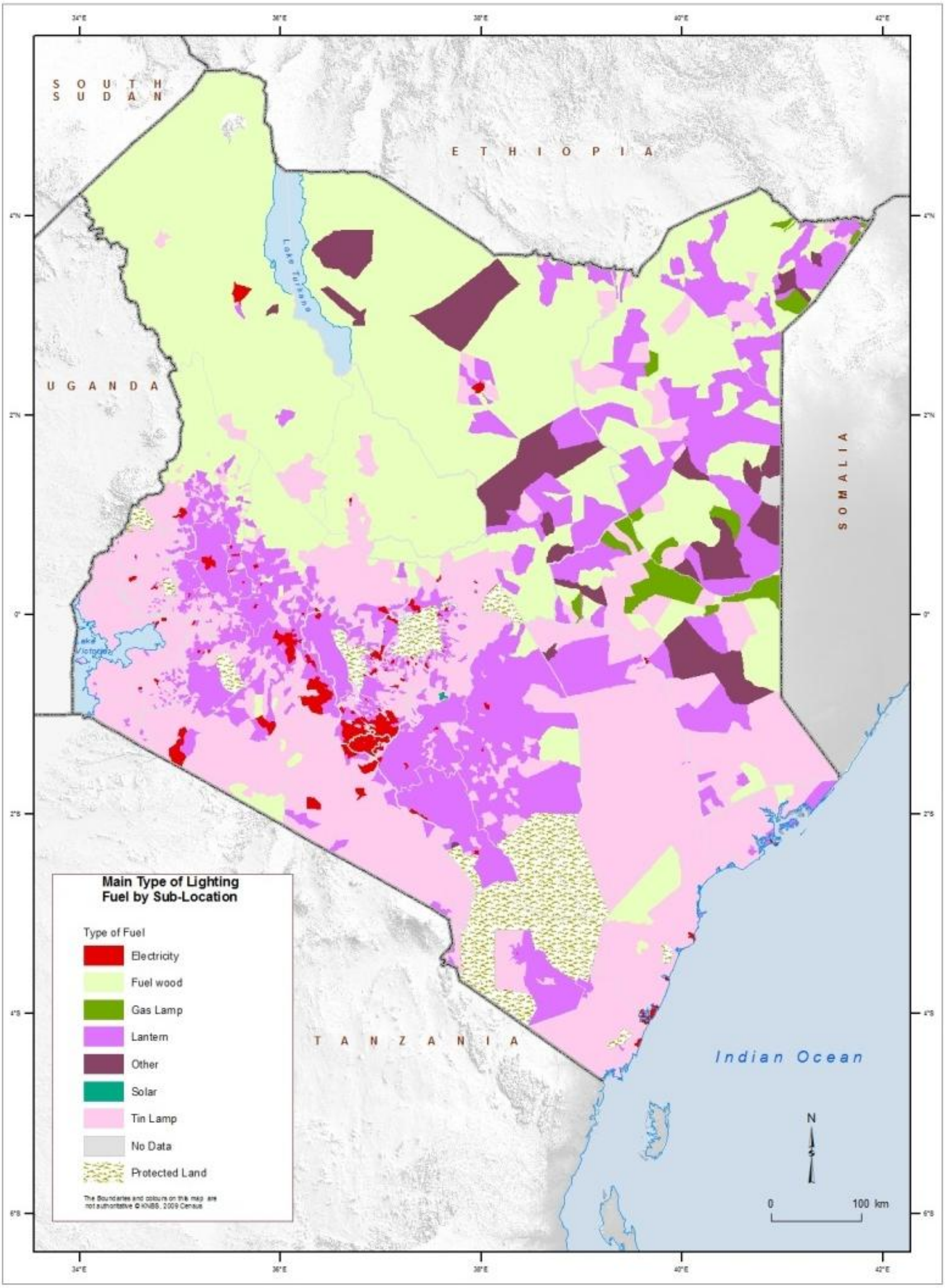
H.7: A Main Source of Cooking Fuel by Sub-location



H.9: Main Source of Lighting Fuel by Sub location

The main sources of lighting fuel by sub location is displayed on map H.10: A.The map indicates that some sub-location falling in the counties of parts of the north rift, upper eastern and north eastern regions which are largely pastoralist areas mainly use fuel wood for lighting while tin lamp is predominant in the rest of Kenya with lantern in significant parts too. This therefore implies that a majority of households in Kenya use paraffin and its related appliances for lighting. Use of electricity for lighting can be traced in pockets of the central and western regions which host most of the urban population of the country. Households in some of the sub-locations in the counties of Mandera, Wajir and Garissa mainly use solar as a source of lighting.

H.8: A Main Source of Lighting Fuel by Sub location



Section J : Technological Household Assets

J.1 Introduction

The 2009 Population and Housing Census captured the ownership of a few essential assets at the household level. The selected items were Radio, Television, Mobile Phone, Computer, Bicycle and animal drawn carts, among others. The spatial distribution of ownership of these assets at the household level is as shown in various Maps as given below.

J.1: A.Proportions of households owning radio

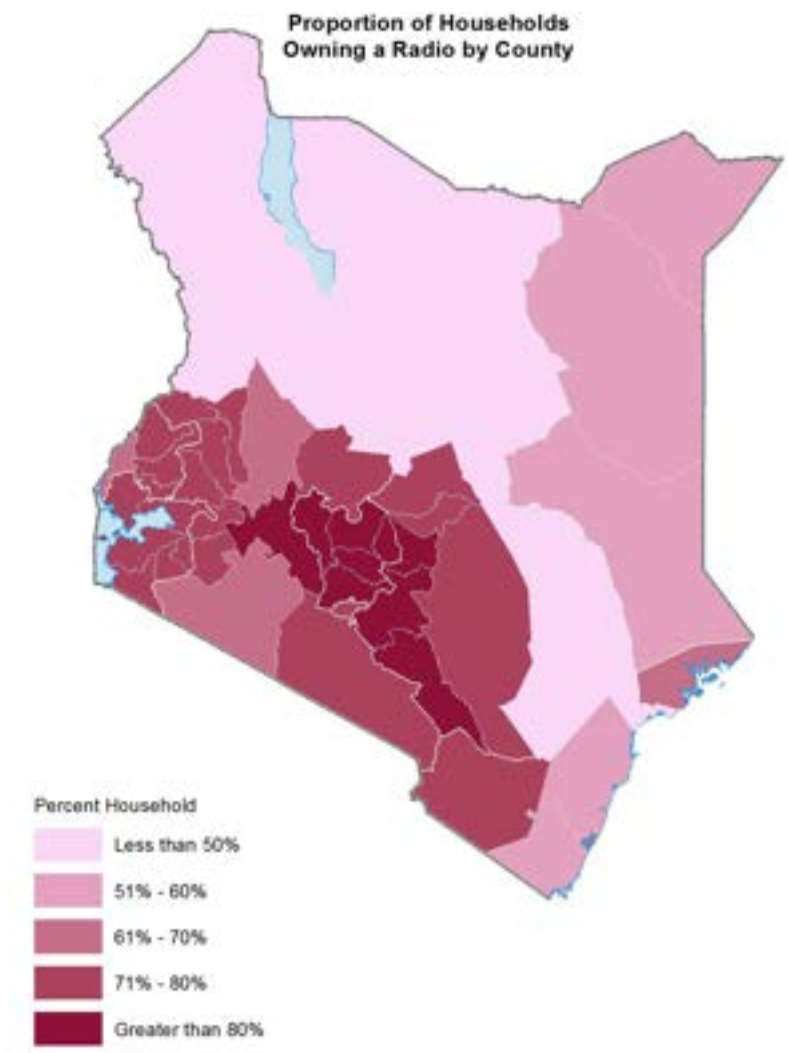
A radio is a gadget that is used for communication of public information to the households. Most radio services include news broadcasts, sponsored announcements and advertisements, among others. Radio is more affordable and cheaper to maintain than television and computers). Depending on the size it is also portable. It is for these reasons that the radio is owned by most households in Kenya at 69 per cent. Map J.1: A shows the Proportion of households owning radio by county. It further indicates that, apart from North Eastern region, whose radio ownership is between 51 and 60 per cent, the ASAL/pastoralist counties are doing poorly in terms of radio ownership at less than 50 per cent of households. Households in all the counties in Western Kenya except Busia have radio ownership ranging between 61-70 per cent. The counties in the Central Kenya region namely Kiambu, Kirinyaga, Muranga, Nyeri, Nyandarua, Machakos and Makueni had the highest proportion of households owning radio at over 80 per cent.

J.1: B . Proportion of households owning television

Ownership of the television, in the ASAL/pastoralist counties is the lowest at less than 1 per cent compared to the national average of 5.3 per cent. Similar to the case of computers, the counties of Nairobi, Kiambu and Nakuru counties have the highest proportion of households owning television at more than 10 per cent. The rest of the counties fall between these two extremes. The spatial distribution of households owning television is shown on map J.1: B.

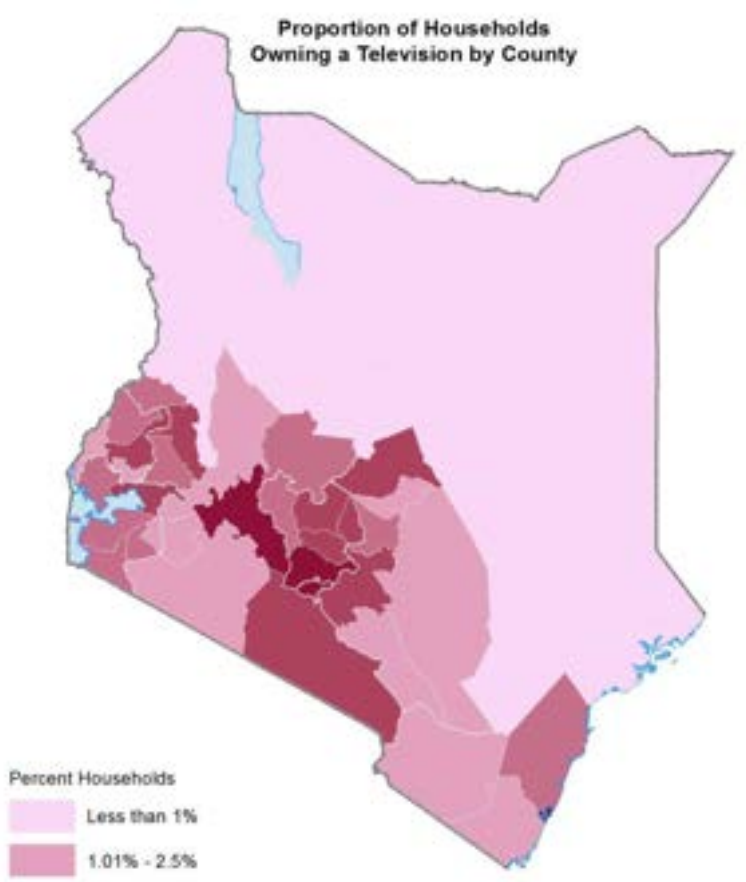
J 1: A and B Proportions of households owning radio and Television

J. 1: A.



The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

J.1: B.



J.2: Proportions of households owning mobile phones by county

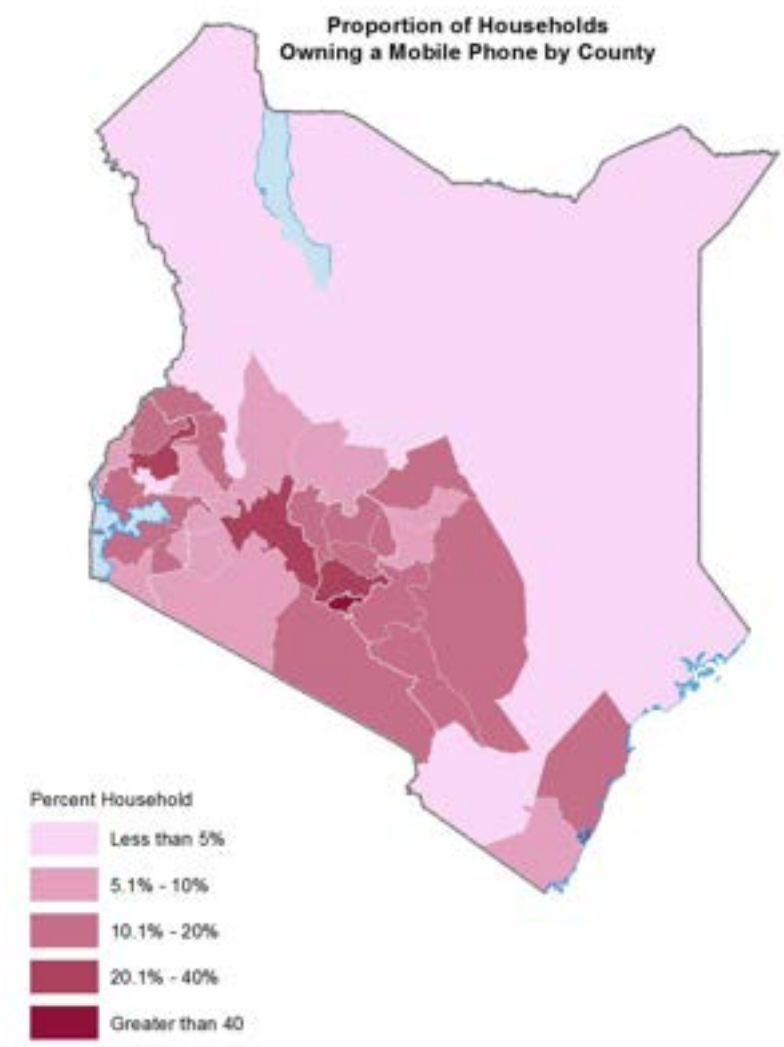
When mobile telephony first came to Kenya, it was only a privilege of the rich in the society. However, the last decade has seen the spread of the mobile telephone networks to include the Kenyan society at large. This has come as a great relief to the households who could not afford the expensive venture of connecting landline telephones to their houses yet telephony was and remains a necessary service for the households. Map J.2: A shows Proportion of households owning mobile phones by county. It reveals that not all Kenyan households own mobile phones. Households in the ASAL/pastoralist regions especially North Eastern, Upper Eastern and North Rift have low ownership of mobile phones. Of the total number of households in these counties, less than 5 per cent own mobile phones. Nairobi county is the best endowed where more than 40 per cent of the households own mobile phones.

Proportions of households owning computers by county

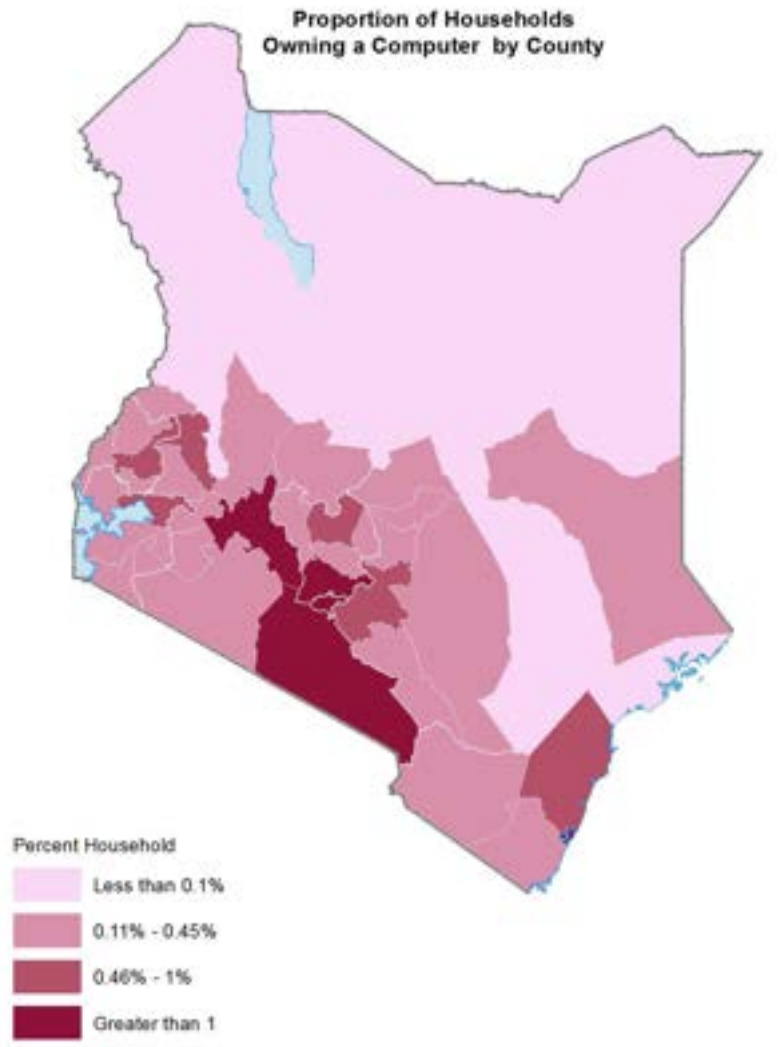
Computer is an important household asset today. Like telephones, computer can be used effectively in communication. It has advantage over telephone headsets and handsets because of its multimedia and multitasking versatility nevertheless relying on telephone networks for some of its functionalities. Apart from communications, it can be a useful tool for household shopping, entertainment, learning, et cetera. However, map J.2: B on Proportion of households owning computers by county indicates that the use of computers at household level is still limited in Kenya. It is important to note that the national average for proportions of households owning computers is a paltry 0.7 per cent. Further, it is only in four counties of Nairobi, Kajiado, Kiambu and Nakuru that had more than 1 per cent of households owning computers.

J. 2: A and B Proportion of households owning mobile phones and Computers by County

J.2.A



J.2: B



0 100 km

The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

J.3: Proportion of households owning bicycles by county

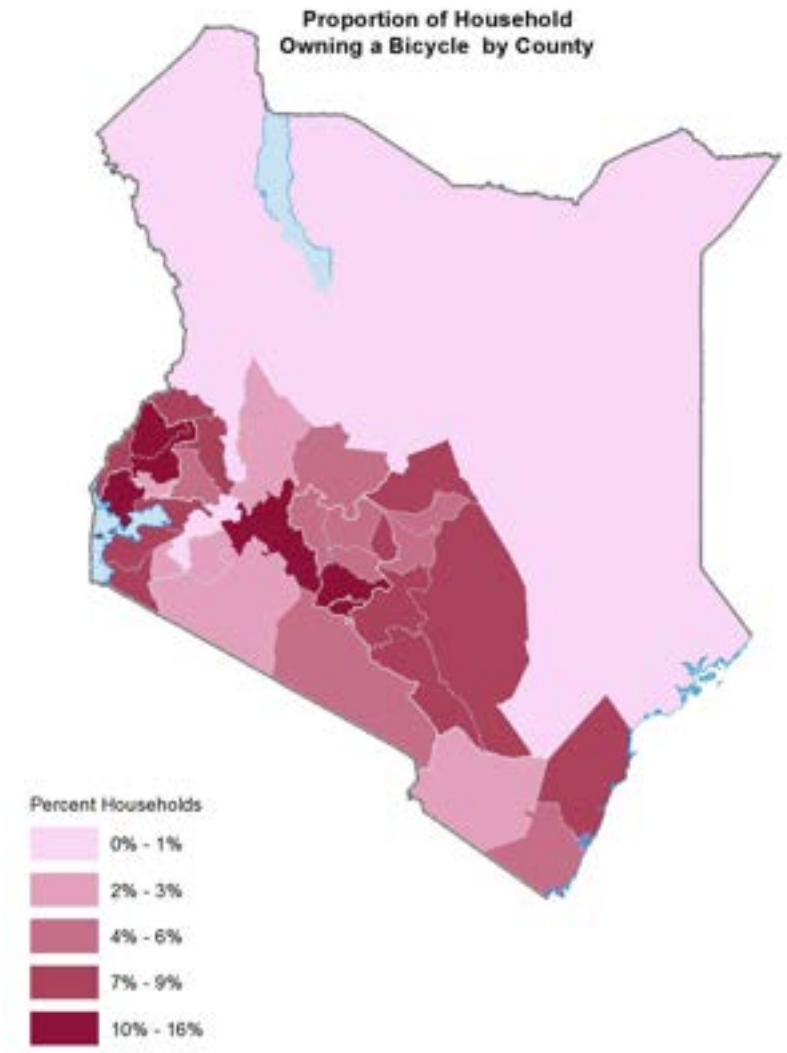
Map J.3: A on Proportion of households owning bicycles by county indicate that in the ASAL/pastoralist counties only 0 to 1 per cent of the households own bicycles. The counties where the highest proportion of households own bicycles are Nairobi, Kiambu Nakuru, Siaya, Bugoma and Kakamega of between 10 to16 per cent.

Proportions of households owning hand drawn carts by county

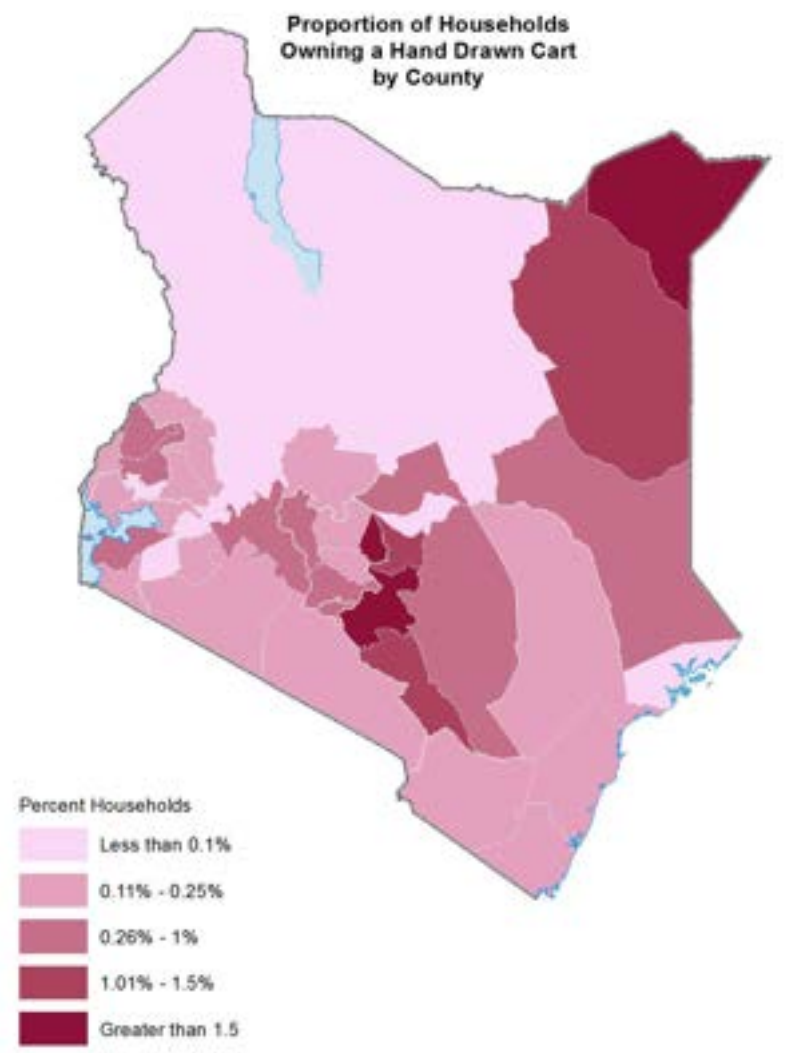
Households were also asked to indicate whether they own handcarts or not. Map J.3: B on Proportions of households owning hand drawn carts by county indicates that households in the counties of North Rift and Upper Eastern regions, Lamu, Meru, Vihiga, Kisii, Nyamira and Kericho counties have ownership of handcarts of less than 1 per cent. On the other hand, the counties with the highest score for proportions of households owning handcarts are Mandera, Machakos and Kiriyaga at more than 1.5 per cent.

J. 3: A and B Proportion of households owning a bicycles and hand drawn carts by County

J.3: A



J.3: B



0 100 km

The boundaries and colours on this map are not authoritative ©KNBS, 2009 Census

Section K: Education

Context

Education remains one of the key sectors in Kenya. This is because the sector is an important vehicle for economic growth, social progress and political development. Education is a fundamental human right as enshrined in the UN Declaration of the Rights of the Child, 1959, The International Covenant on Economic, Social and Cultural Rights, 1966 Articles 13 & 14, The Convention on the Elimination of All Forms of Discrimination against Women, 1979 Article 10, the Convention on the Rights of the Child, 1989, Articles 28 & 29, and the Kenya's Constitution 2010, Article 43:1 (Republic of Kenya, 2010).

Research findings and experiences from more industrialized countries indicate that education and training builds human capital, fosters economic growth, reduces poverty, improves the income distribution and employment opportunities, and promotes gender equality. Education also delivers social objectives such as improved health and survival rates of children under the age of five years. It promotes the use of modern contraceptives thus reducing fertility rates. Education is also a powerful tool to increase support for democracy, build civic attitudes and reduce conflict. In Kenya, education and training are key elements in the country's plans for socioeconomic development and is one of the pillars and a prerequisite for the achievement of Vision 2030, and Millennium Development Goals (MDGs), (Republic of Kenya, Vision 2030; 2005).

The globalised and competitive economy calls for investment in quality education and training. This is a system that equips individuals (boys and girls, women and men), with competencies and skills to compete internationally. In the last decade, the Government of Kenya and its development partners have not only focused on improving educational opportunities for all, but have had deliberate interventions targeting expanding education opportunities for girls and other vulnerable groups such as orphans. This commitment is reflected on the establishment of various legal and policy frameworks. In order to improve school enrolment and access to basic education, the Government of Kenya introduced Free Primary Education (FPE) programme in 2003 and Free Day Secondary Education in 2008.

The education sector has recorded tremendous improvement in access and equity at all levels since independence in 1963. The proportion of the population that never went to school declined substantially from 40 per cent in 1979 to 24 per cent in 1989. In 1999 the population that never went to educational institutions was 17.9 per cent declining marginally to 17.3 per cent in 2009. Analysis of the various censuses data shows substantive improvement in the educational attainment of the population. The proportion of population with upper primary education (Std 5-8) increased from 19.7 per cent in 1979 to 30.9 per cent in 1999, while that of Secondary education (Form 1 to 4) from 9.4 per cent to 16.1 percent respectively.

Introduction

The objective of these maps is to show the spatial distribution of the population enrolled, those completed school (attained) and those who have never attended school. The section presents the analysis of education status of the population and the maps present the proportion of the population based on data collected from the population enumerated in the 2009 Population and Housing Census on the status of schooling. The 2009 Census Questions on Education were in columns P39 to P41of the 2009 census questionnaire and enquired about education status of each person in a household. The education questions sought information on school attendance, Enrolment and Attainment, limited to the population 3 years and above. The maps in this section are arranged in order of enrollment, attainment and never attended school by education levels and sex by county.

K.1: School Enrolment

The population attending school is used as a measure of school enrolment. The maps are based on analysis of the population attending school and the highest standard or form reached. This information is critical especially when the official primary school age is considered in view of the Government's policy on Free Primary Education (FPE) to achieve universal primary education (MDG 2 and Education for all (EFA) goals). Both the free primary education (FPE) and free day secondary education (FDSE) were introduced to boost the number of students enrolling in both primary and secondary.

Cultural practices such as perceived roles of the male and female child at different ages, value of education in the community, poverty and availability and accessibility of learning institutions are among the factors that influence enrollment rates at the different levels.

Overall net enrolment is highest in primary school with a national average of 78 per cent **(**Map K.2C**)**, followed by pre-primary with a national average of 42 per cent (Map K.1C) and the least is university enrolment at 1.05 per cent **(**Map K.4C**)**.

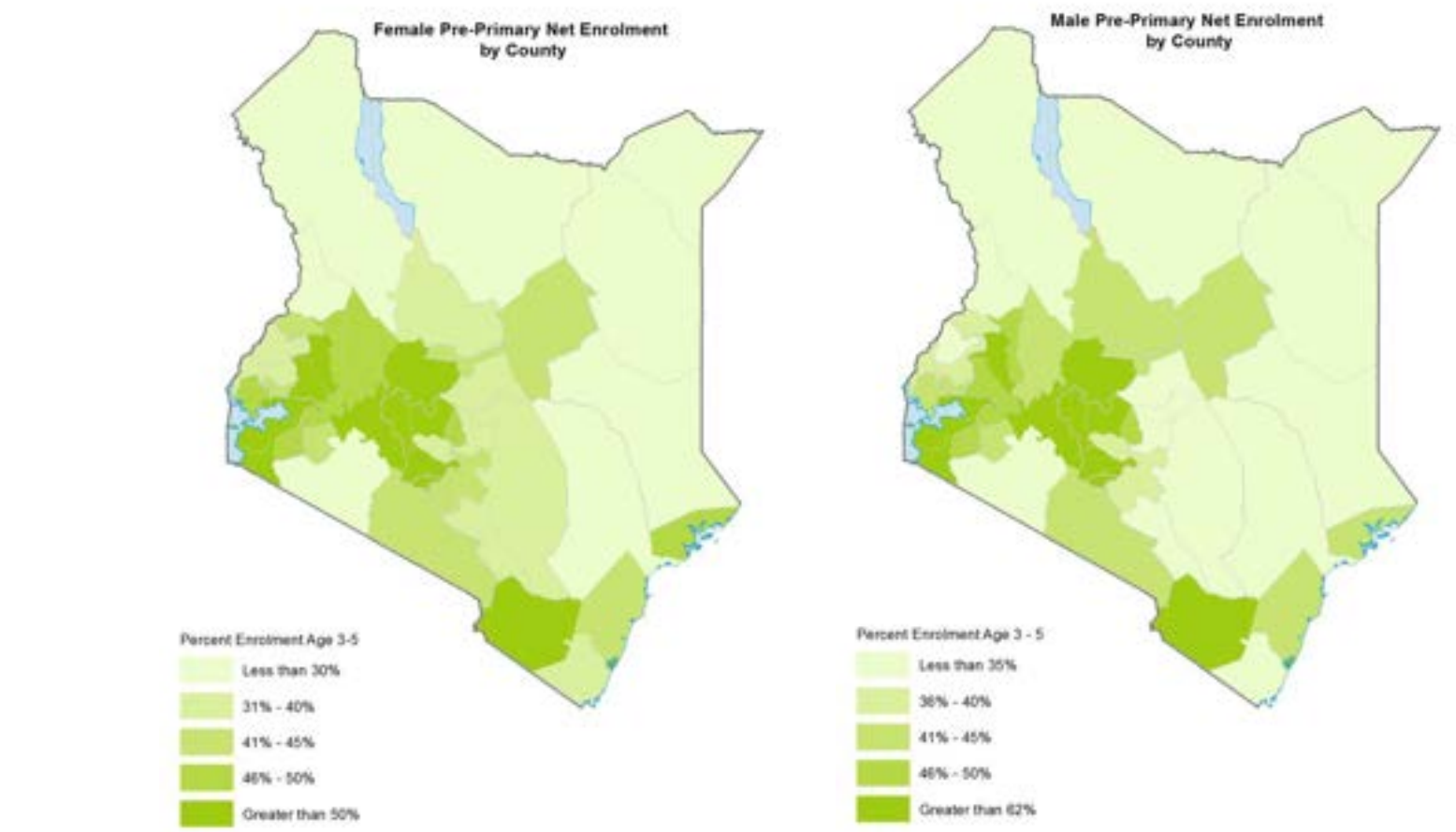
In spite of the free tuition secondary education (FTSE), enrolment rates in secondary are still below 50 per cent as this is the age that most children are involved in labor to supplement the family income and the emphasis on early marriage by some of the cultures especially for the girl child. Another possible reason for the low enrolment in secondary is the lack of sufficient secondary schools especially in the ASAL regions. The country has few universities which are concentrated in the cities and major towns, thus making it inaccessible for many students.

Pre- Primary Enrolment

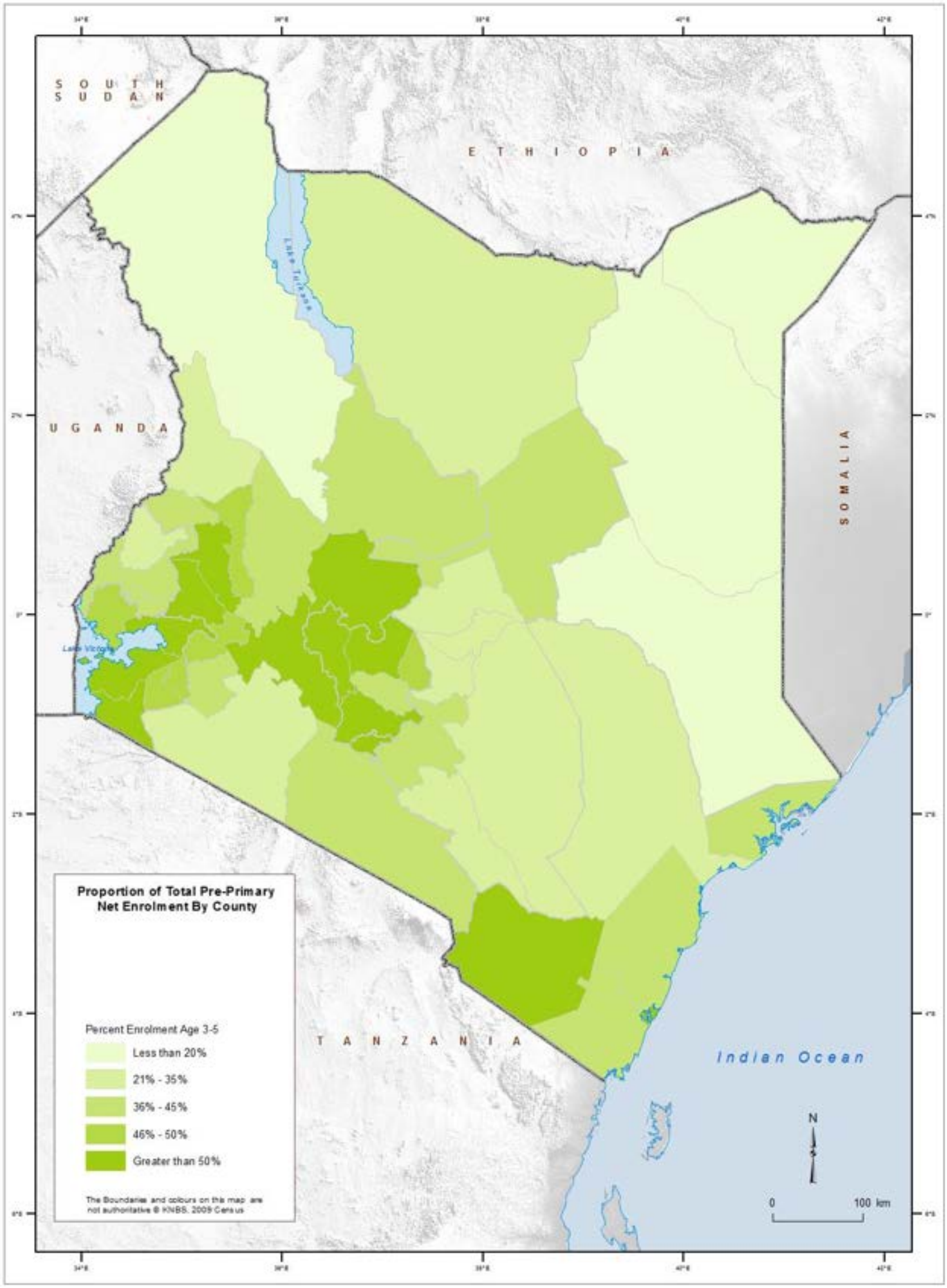
Both males and females in Taita Taveta, Nairobi, Kiambu, Nakuru, Nyandarua, Nyeri, Laikipia, Migori, Homabay, Kisumu, Nandi and Uasin Gishu County had net enrolment of above 50 per cent (Maps K.1 A & B). Counties recording less than 20 per cent net enrolment were Turkana, Mandera, Wajir and Garissa (Map K.1.C). The female net enrolment in pre-primary was 42 per cent (Map K.1 A) and 41 per cent net enrolment for males (Map K.1 B).

K.1: A and B Proportion of Pre-Primary Net Enrolment by Sex and County

K.1.A K.1.B



K.1: C.Proportion of Total Pre Primary Net Enrolment

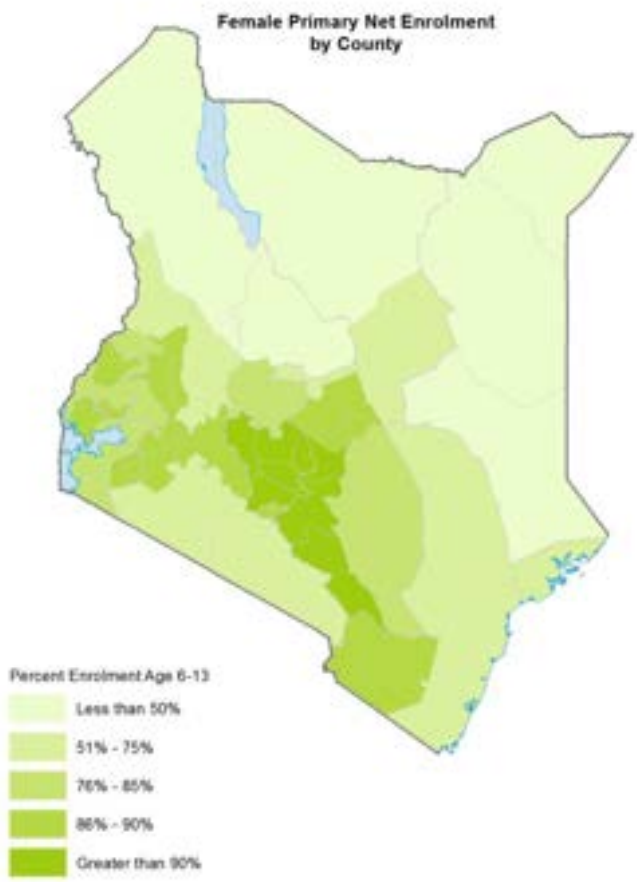


K.2: Primary School Enrolment

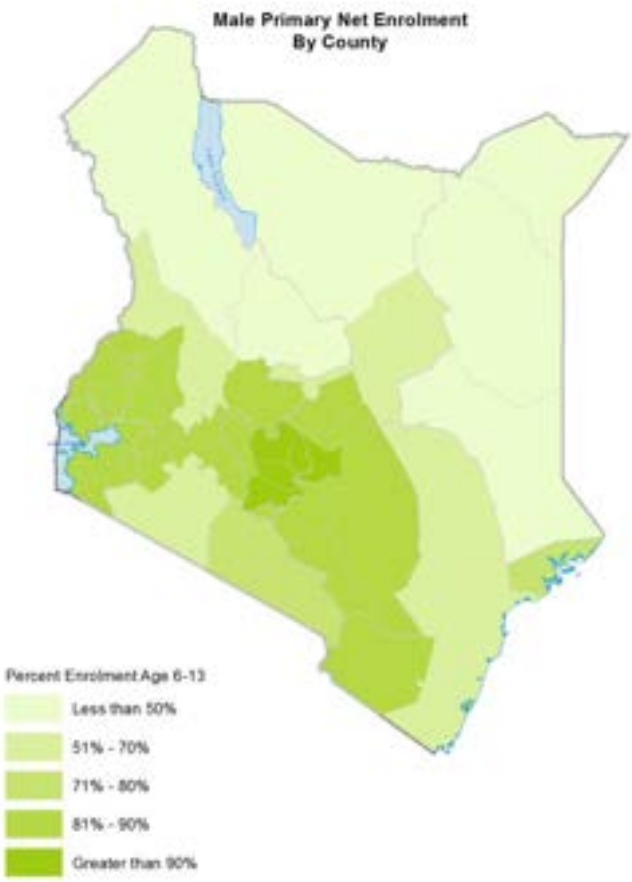
The average net enrolment for females in primary schools was 79 per cent (Map K.2: A), compared to 77 per cent for males (Map K.2: B) and 78 per cent for both males and females (Map K.2:C). Counties with both males and females enrollment in primary of greater than 90 per cent were, Kiambu, Kitui, Nyeri, Murang'a, Kirinyaga and Embu (Maps K.2: A, B and C). Counties with less than 50 per cent enrolment for both males and females were Turkana, Samburu, Marsabit, Mandera, Wajir and Garissa (Maps K.2: A, B and C).

K.2: A and B Proportion of Net Enrolment in Primary by Sex and County

K 2.A



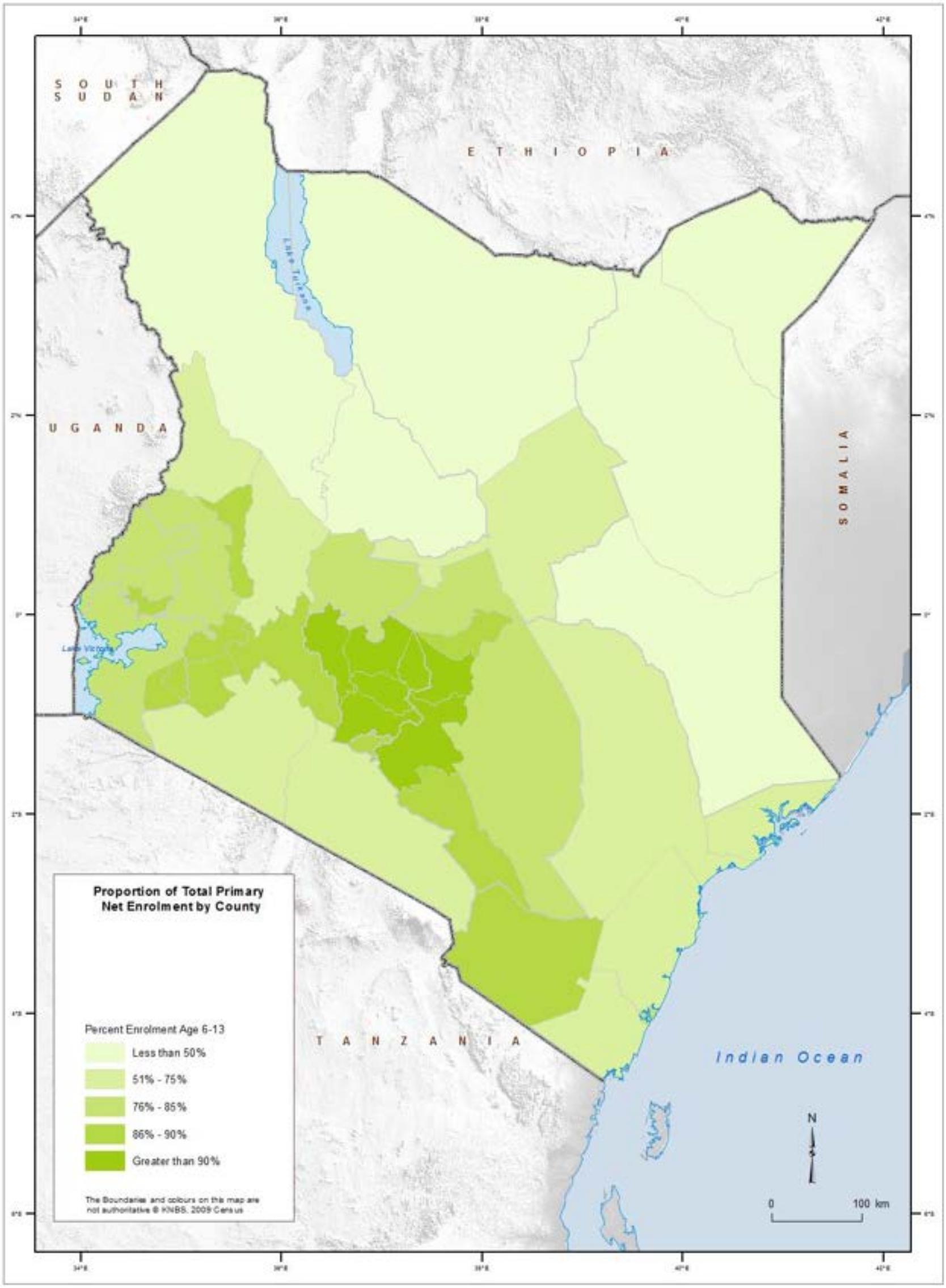
K.2: B.



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K.2: C.Proportion of Total Net Enrolment in Primary by Sex and County

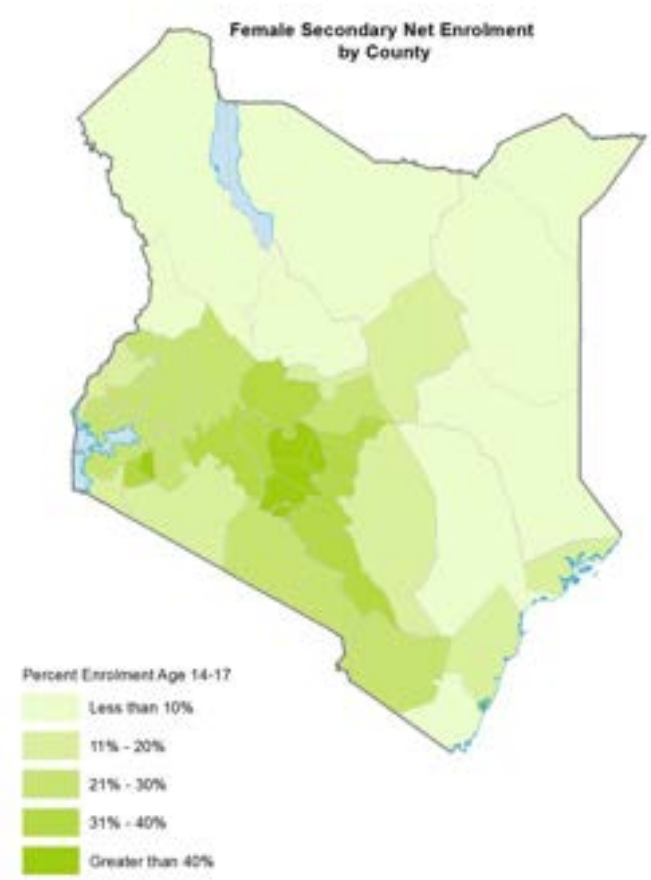


K.3: Secondary School Enrolment

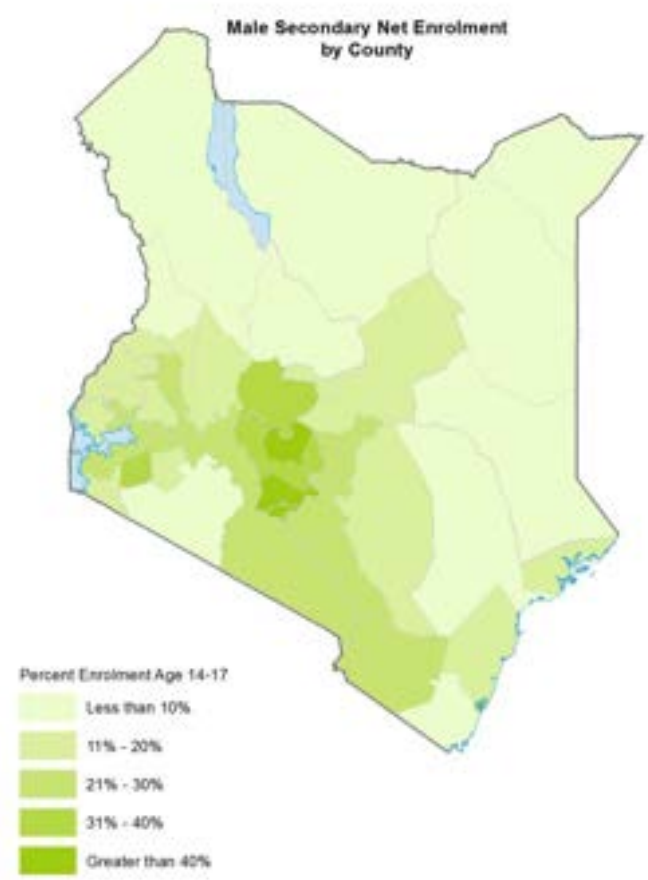
Counties with both male and female enrolment of 41-50 per cent were Nairobi, Kiambu, Meru, Mombasa and Nyamira, while Kwale, Tana River, Garissa, Mandera, Wajir, Marsabit, Turkana, Samburu and West Pokot had net enrolment of between 4-10 per cent (Map **K.**3:C). Counties recording a net enrolment of more than 40 per cent for males are Nairobi, Kiambu and Nyeri while Turkana, West Pokot, Samburu, Marsabit, Mandera, Wajir, Garissa, Narok, Tana River and Kwale had less than 10 per cent net enrolment (Map K.3:B). Counties with female net enrolment at secondary school of more than 40 per cent were Nairobi, Kiambu, Murang'a, Nyeri, Kirinyaga and Nyamira, while Kwale, Tana River, Garissa, Wajir, Mandera, Marsabit, Samburu, Turkana and West Pokot had net enrolment of less than 10 per cent (Map K.3: A).

K.3: A and B Proportion of Net Enrolment in Secondary by Sex and County

K.3: A



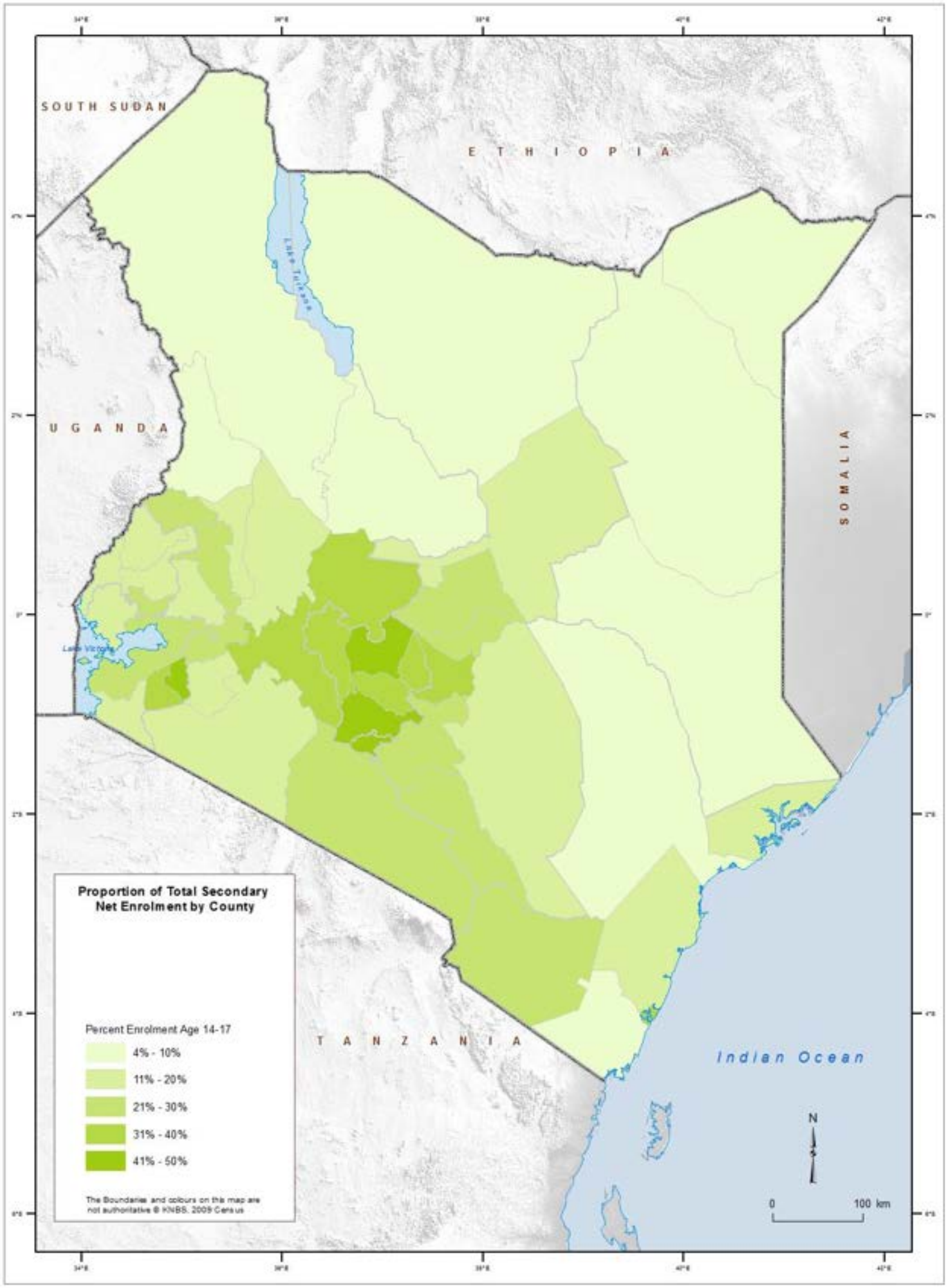
K.3: B



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K.3: C.Total Net Enrolment in Secondary School by County



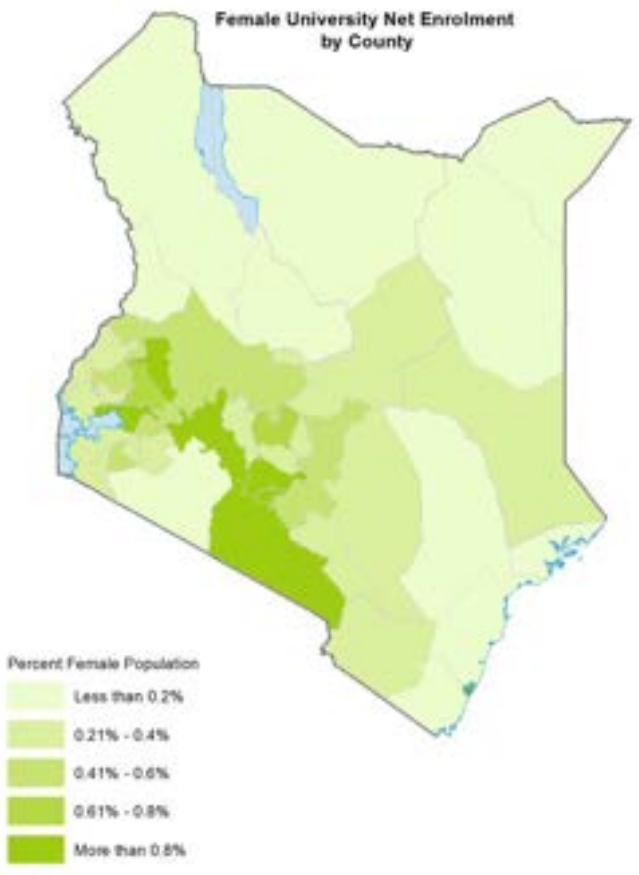
K.4: University Enrolment

University education is a critical component of human development. It provides not only the high-level skills necessary for every labor market but also the training essential for professionals such as teachers, doctors, nurses, civil servants, engineers, entrepreneurs, scientists, social scientists, and a myriad of other personnel. In this atlas, gross enrolment is used for mapping participation in university education. The atlas used population of age 18-30 years attending university education.

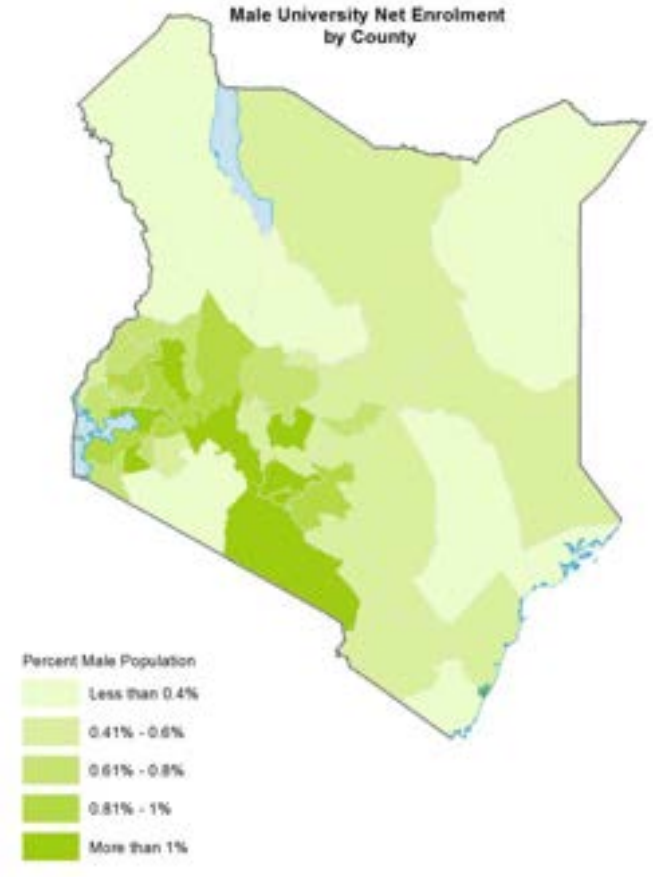
The national average university total enrolment for the population aged 18-30 was 1.05 per cent. Counties with greater than 1.6 per cent university enrolment were Kajiado, Kiambu, Nairobi, Nakuru, Nyeri, Uasin Gishu and Kisumu as shown in Map K4: **C.**In the total population counties with less than 0.4 per cent university enrolment were Mandera, Wajir, Garissa, Lamu, Tana River, Kilifi, Kwale, Narok, West Pokot, Turkana, Samburu and Marsabit, the same counties had between 0.1 and 0.4 per cent females enrolled in university. In terms of gender, university enrolment for the male follow similar trend as the national average university enrolment (Map K: B). The counties with more than 1.6 per cent university female enrolment are Kajiado, Nairobi, Kiambu and Uasin Gishu. For the females the national average university enrolment was 0.83 per cent. For the male university enrolment, counties with between 0.2 per cent and 0.4 per cent were Mandera, Turkana, Samburu, Tana River, Lamu, and Kwale. University enrolment is displayed on maps K.4: A, B and K.4: C.

K4: A and B Proportion of Net Enrolment in University by Sex and County

K.4: A.



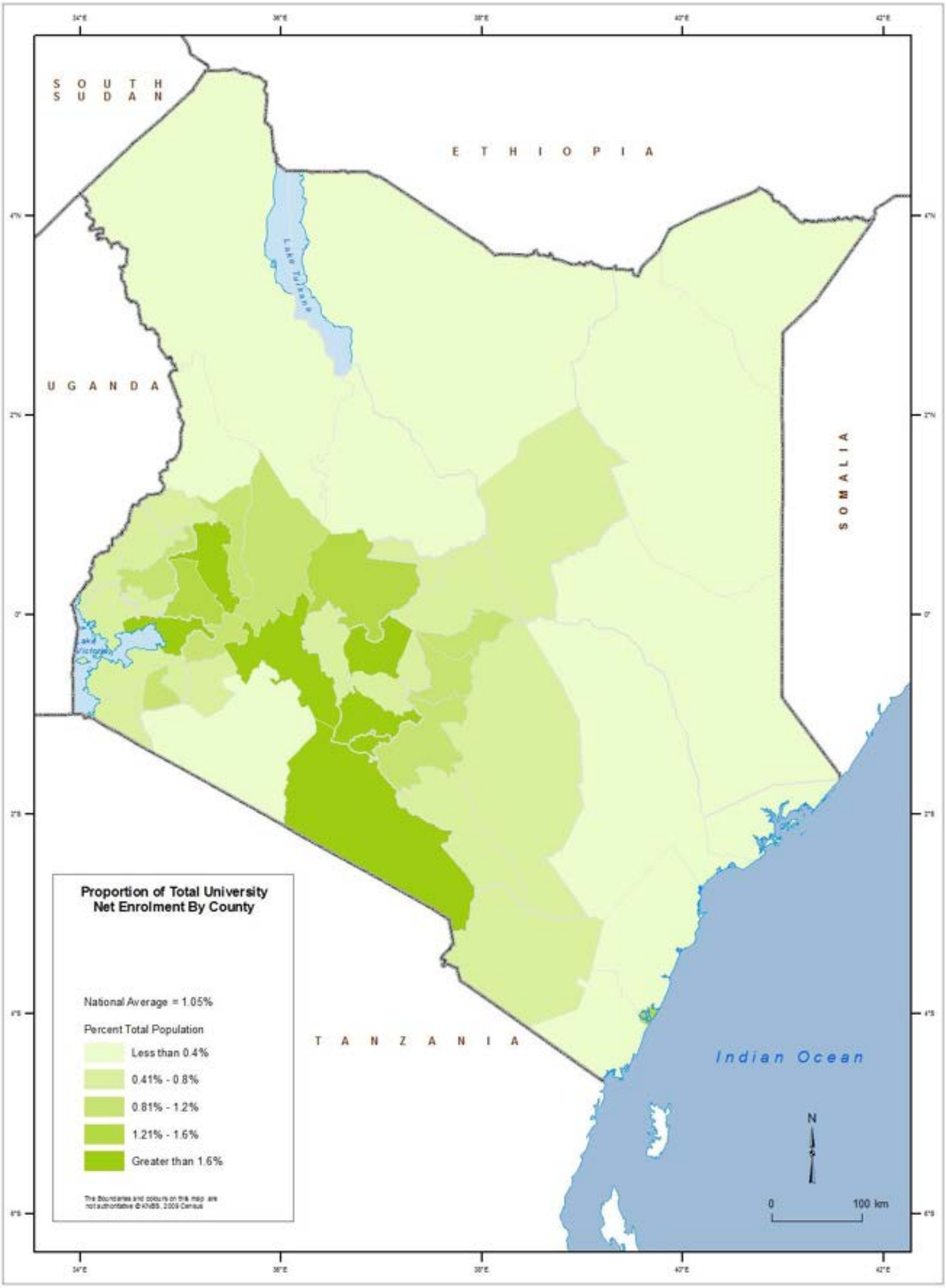
. K.4: **B.**



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K.4: C.Total Net Enrolment In University By County



K.5: Education Attainment

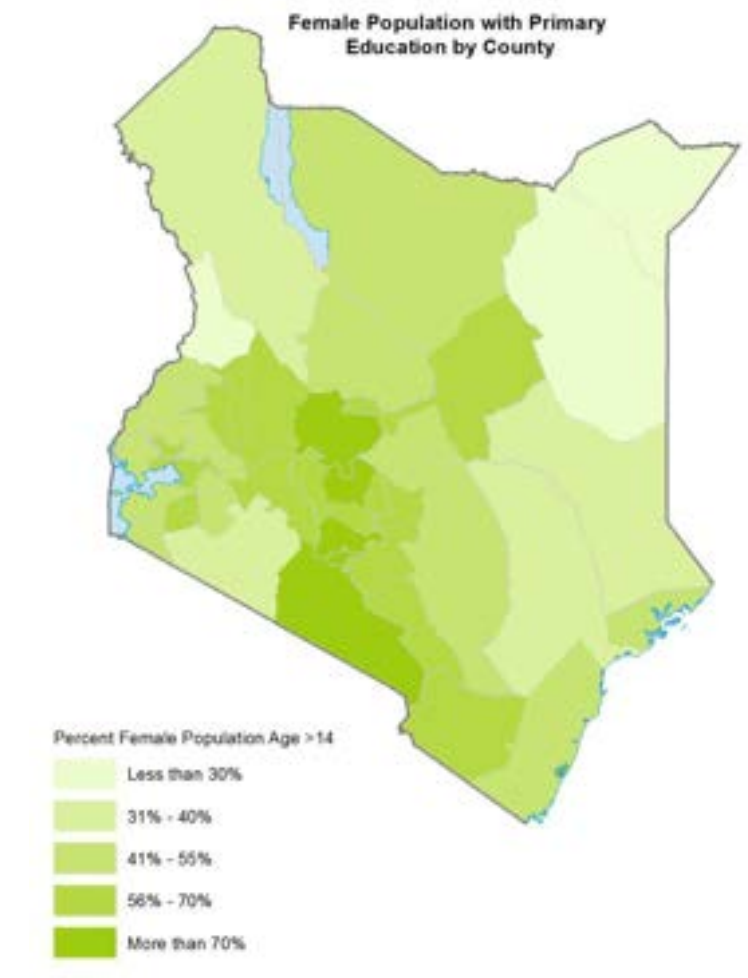
The 2009 Kenya Population and Housing Census recorded information about the highest educational level reached (attained) by age and sex. The highest level attained meant the highest level completed. The Census used the following categories of educational attainment: "None" which included persons who were 3 years but whose education status not reported due to underage; primary education; secondary education; and university. The category of "university" is for all university graduates, including undergraduates and those with post-graduate degrees in 2009.

Primary School Attainment

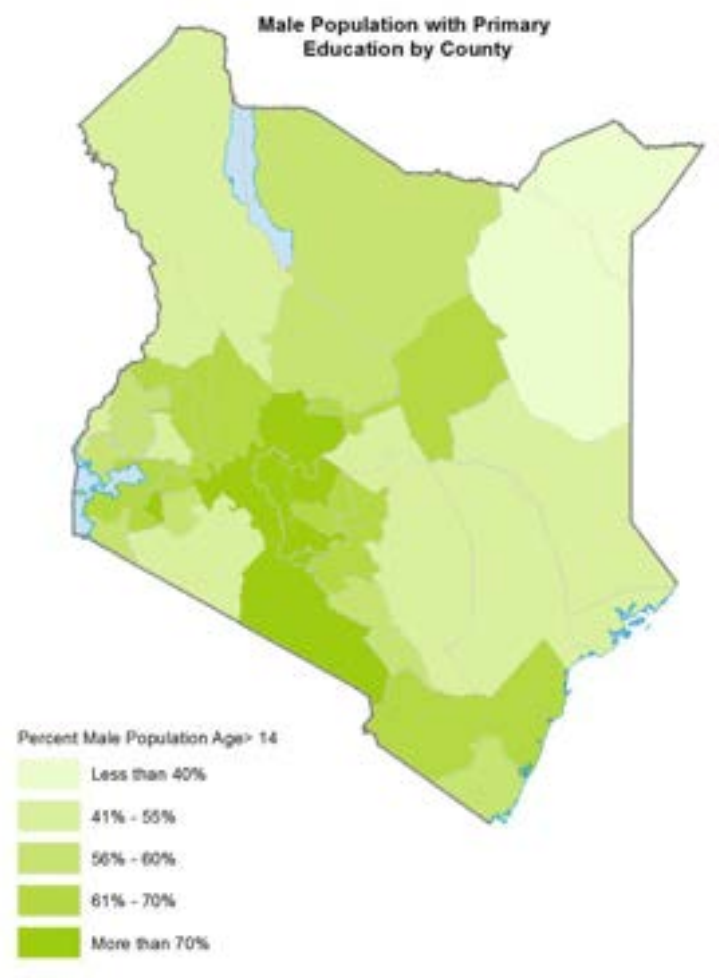
The national average proportion of the population above age 14 years who have attained primary level of education was 58 per cent. Counties of Wajir, Mandera and West Pokot had total proportion of the population who had attained primary level of education as less than 40 per cent, map K.4:**C.**The counties of Kajiado, Nairobi, Laikipia, Nyeri, Kiambu, Nakuru and Nyandarua had total proportion of the population aged greater than 14 years who had attained primary level of education as greater than 70 per cent. These counties with over 70 per cent primary level attained are considered high potential in terms of agricultural production and income levels. The pattern depicted by the proportion of males who had attained primary level of education is similar to the one depicted by the national average attainment except for Nyamira County which have proportion of male of age greater than 14 years to have attained primary level of education greater than 70 per cent (K.4: B). However, for the female attainment, the maps show similar trend in attainment except for the Nakuru and Nyandarua counties whose proportion of the population who had attained primary level of education was between 61 and 70 per cent (Map **K.**5: A). The maps suggest that in terms of attainment for the populations who have completed primary school (age greater than 14 years), majority of the counties have less than 60 per cent primary education attainment even though there have been sound policies put in place to achieve at least completion of primary education as enshrined in the Millennium Development Goal (2); the achievement of Universal Primary Education.

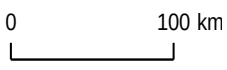
K.5: A and B.Proportion of population with Primary Education by Sex and County

K.6: A.



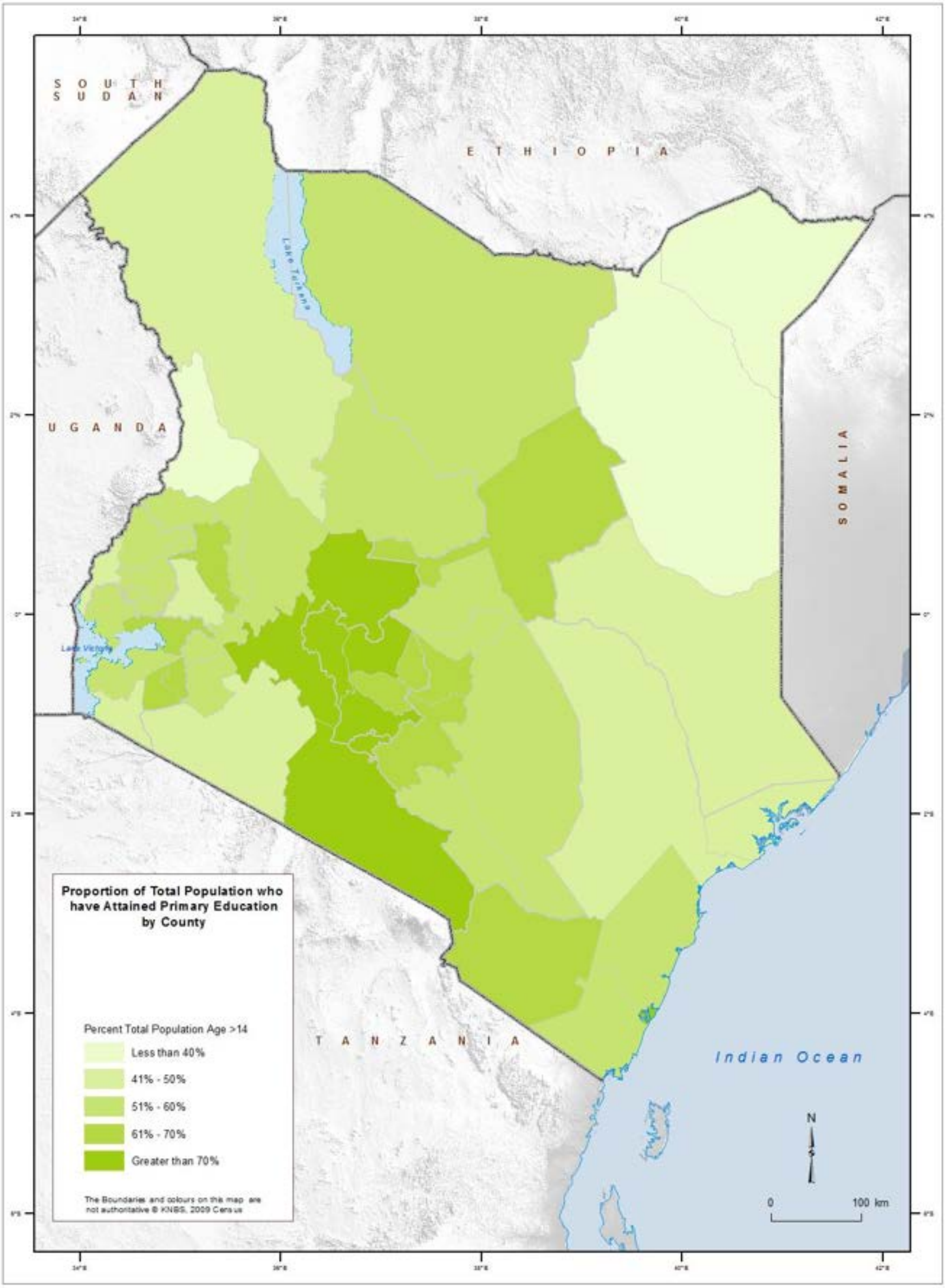
K.5: B





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K.5: C.Proportion of Total Population with Primary Education by County

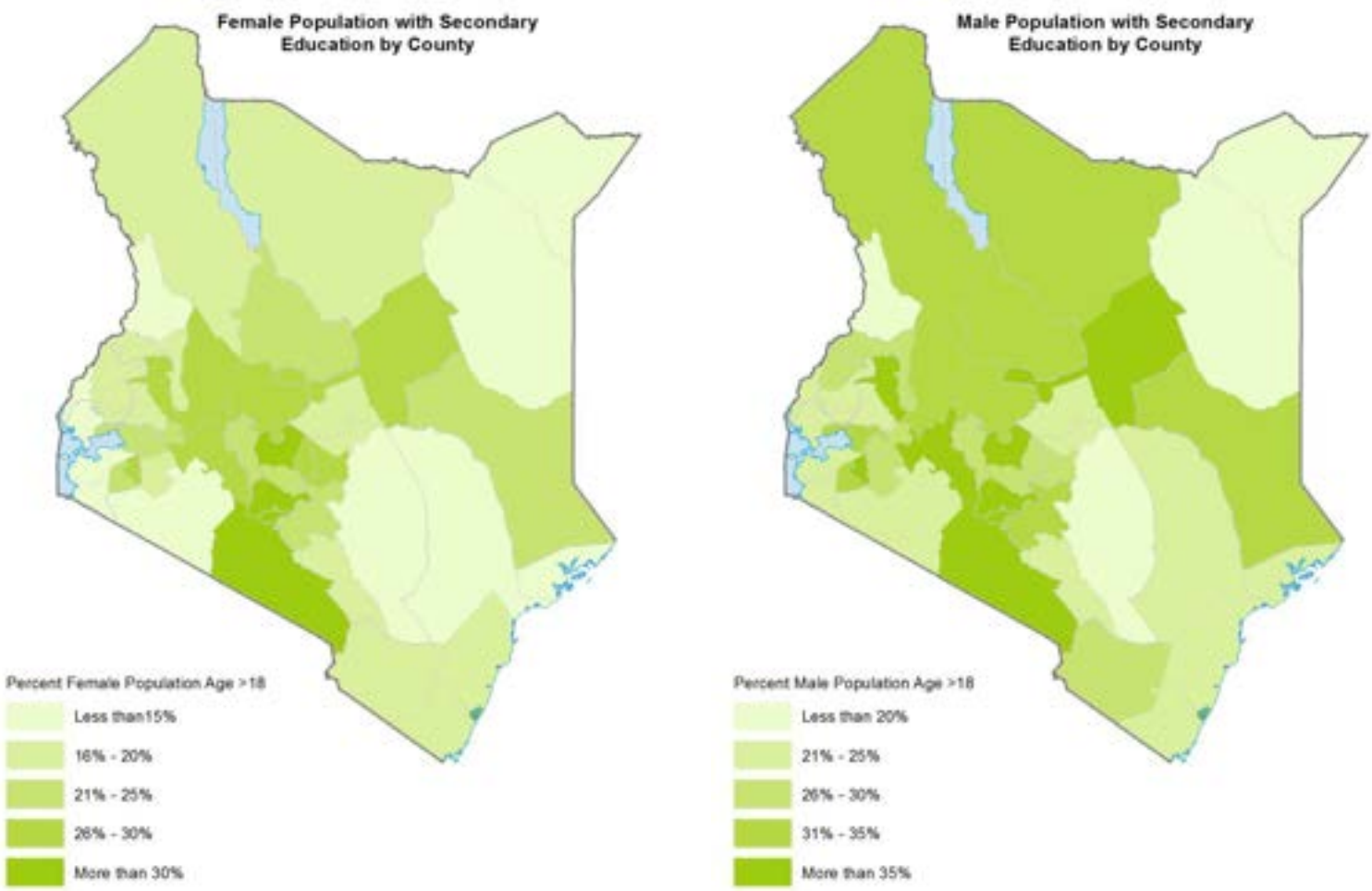


K.6: Secondary School Attainment

At secondary level, the national average for the total population is 25 per cent, 29per cent for males and 21per cent for females (Maps K.6: A, B and C). Counties with greater than 35 per cent secondary attainment for the total population are Kajiado, Nairobi, Kiambu and Mombasa while Mandera, Wajir, Meru, Kitui, Makueni, Kilifi, Lamu, Tana River, Narok, West Pokot and Nandi had proportions of less than 20 per cent of persons aged 18 years and above having attained secondary education).

K.6: A and B Proportion of Population who have attained secondary Education by Sex and County

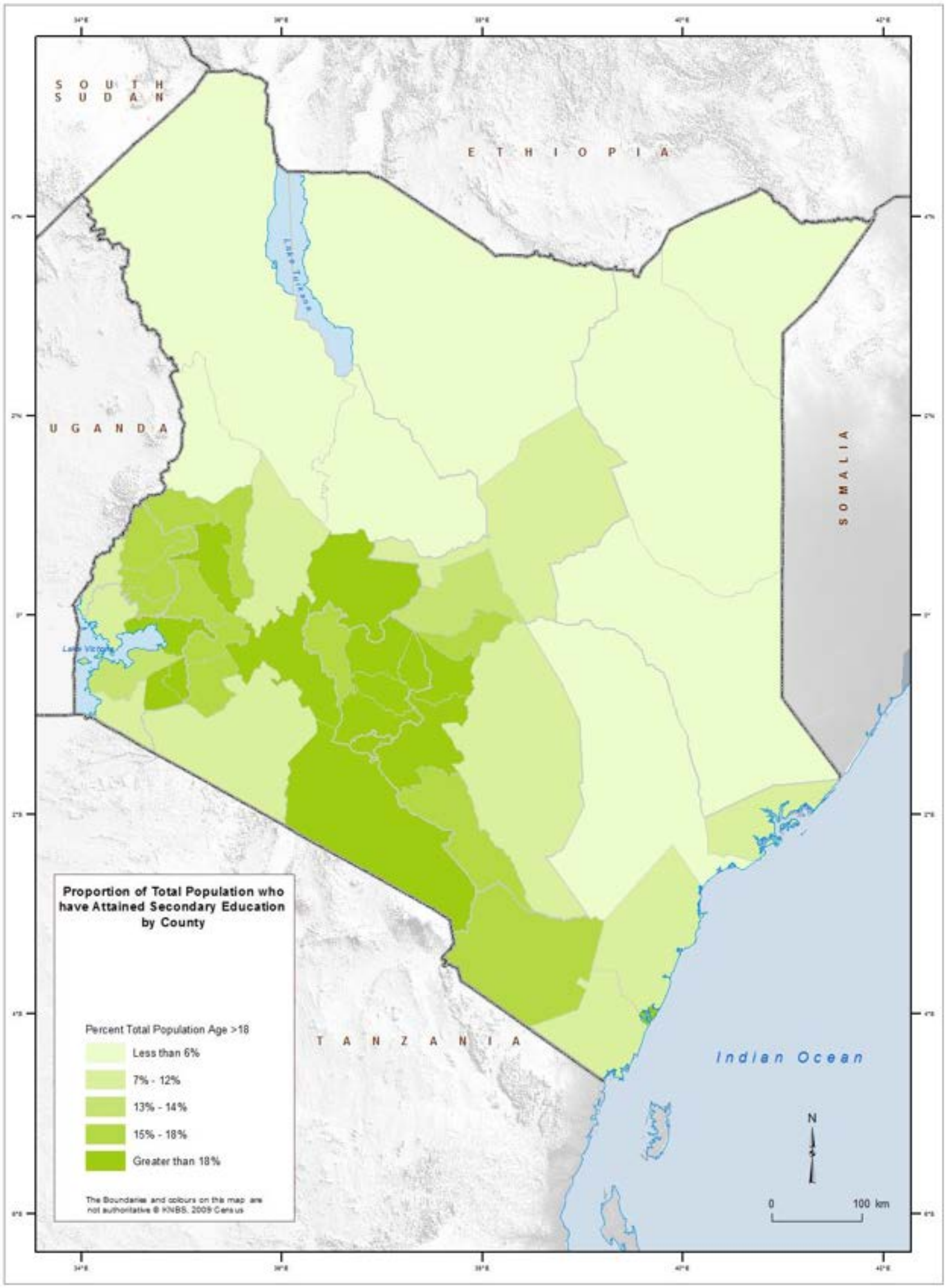
K.7: A. K.6: B.



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K.6: C.Proportion of Total Population with Secondary Education by County

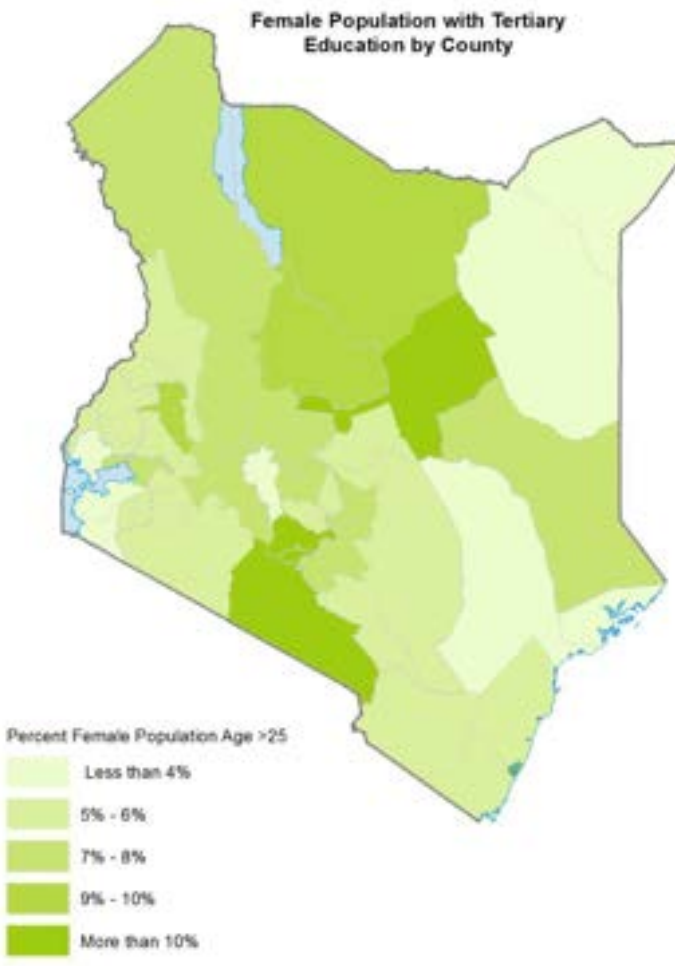


K.7: Tertiary Education Attainment

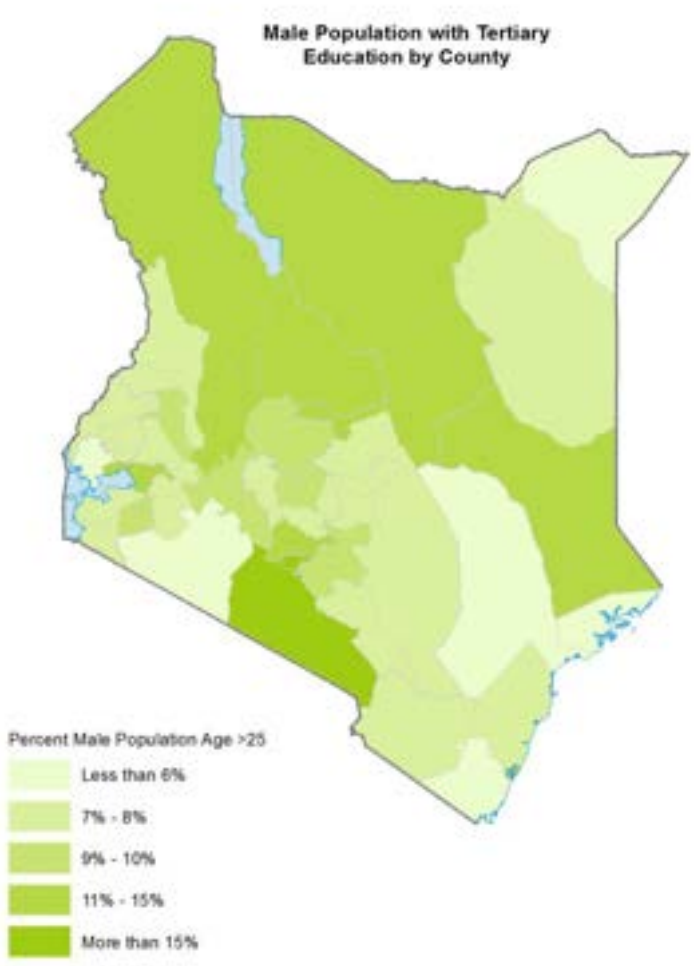
In this section tertiary education refers to population with post secondary education either certificate, diploma or degree. The national average of the population 25 years and above who had attained tertiary education (Post-Secondary) is 7.5 per cent, 6.3 per cent for females and 8.5 per cent for males as shown in Map K;7 A,B, **C.**The counties with greater than 11 per cent tertiary attainment are Kajiado, Nairobi, Kiambu, Mombasa and Samburu while those with less than 5 per cent are Mandera and Lamu .

K.7: A and B Population with Tertiary Education by Sex and County

K.8: A.



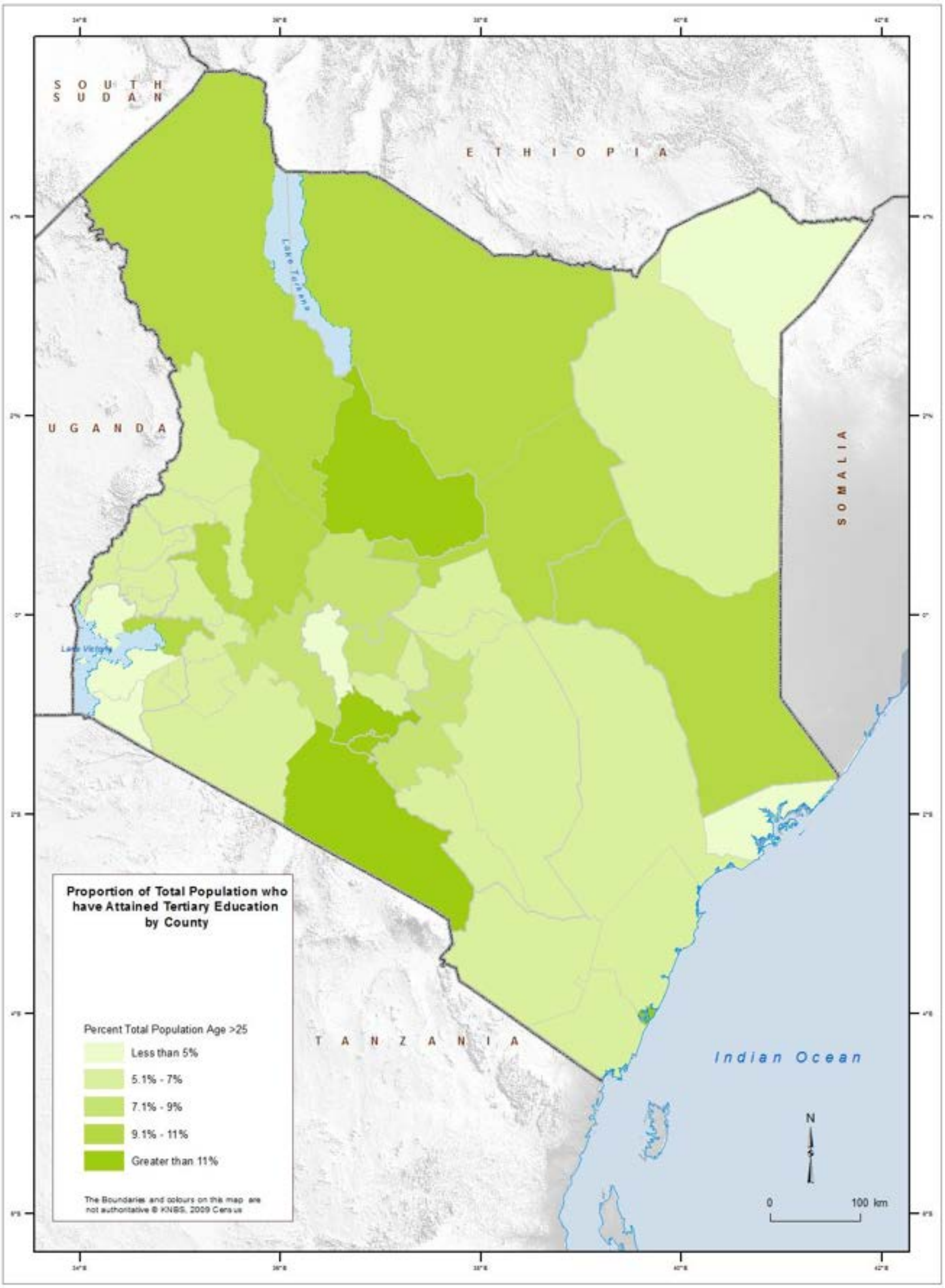
K.7: B.



0 100 km

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K.7: C.Total Population with Tertiary Education by County



K.8: Population Never Attended School

The 2009 Population and Housing Census had three categories for school attendance: “At school”, “Left school” and “Never went to school”. The information was collected from persons aged three years and above. According to the Ministry of Education policy the official age cohort for schooling is 3-5 years for pre-primary, 6-13 years for primary education, and 4-17 years for secondary education. Gender roles still remain a key factor to school attendance. The national average of the total population (age 6-17) who had never attended school was 11.2 per cent as shown in Map K.8: **C.**

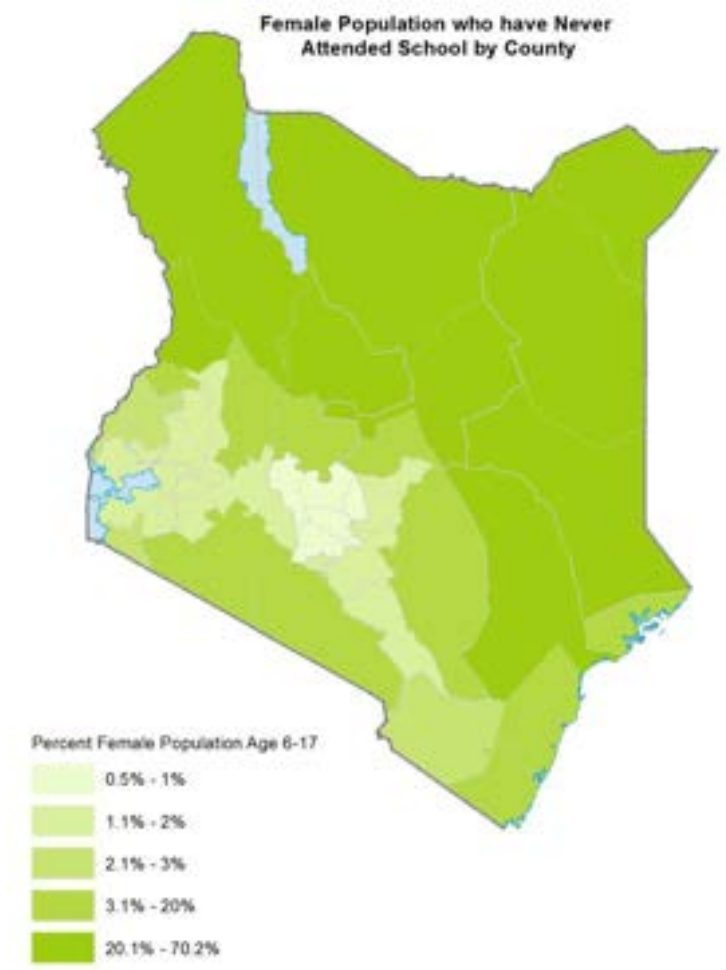
The average number of females who had never attended school was higher than the total population average 29 per cent of while the average for males was less than the average for the total population 19 per cent (Map K.8: A & B).
Besides gender, attendance is influenced by among other factors such as culture, poverty, food insecurity, security, child labor and infrastructural development. The largest proportions of those who had never attended school were in counties that fall under the arid and semi arid lands (ASAL).

All counties in the North Eastern Province, upper part of the Rift Valley province, upper parts of Eastern province and coast province with the exception of Mombasa and Lamu recorded proportions of more than 30 per cent of the total population who had never attended school; more than 50 per cent of male population in upper part of the Rift Valley, North Eastern and parts of upper Eastern Province, and greater than 60 per cent of female population in Turkana, Marsabit, Mandera, Tana River, Wajir, Samburu and Garissa (map K.8: A&B).

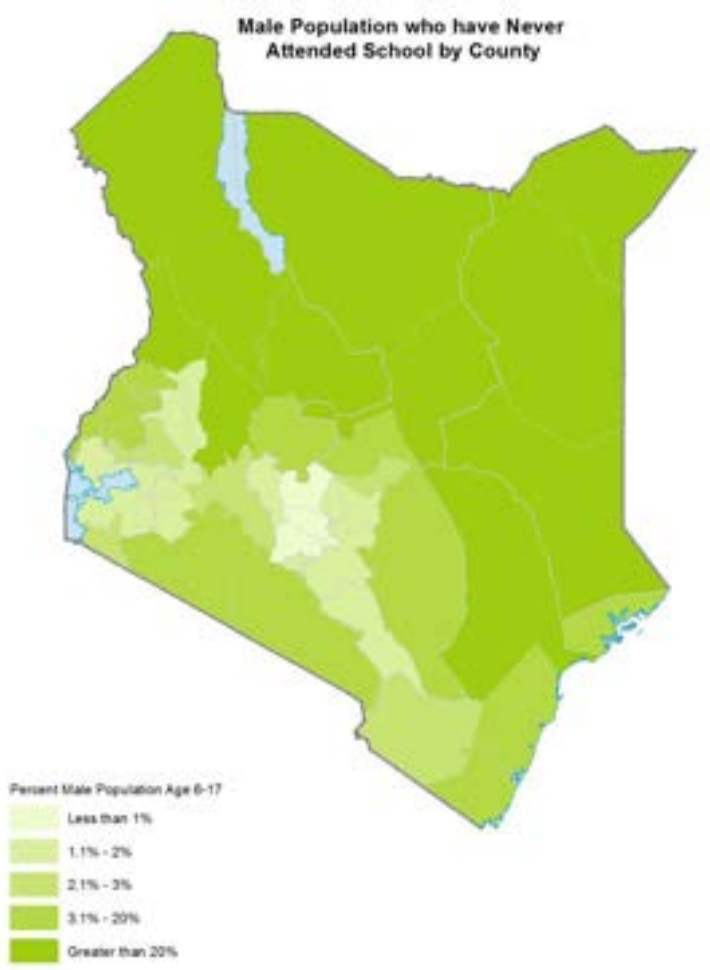
Counties in the high potential areas which also happen to be more secured and rich (counties in central, Nyanza, Western provinces and Nairobi) recorded less than 10 per cent of the population of both males and females who had never attended school (map K.8: A & B).

K.8: A and B Population who never attended school by Sex, age group (6 -17) and County

K.9: A



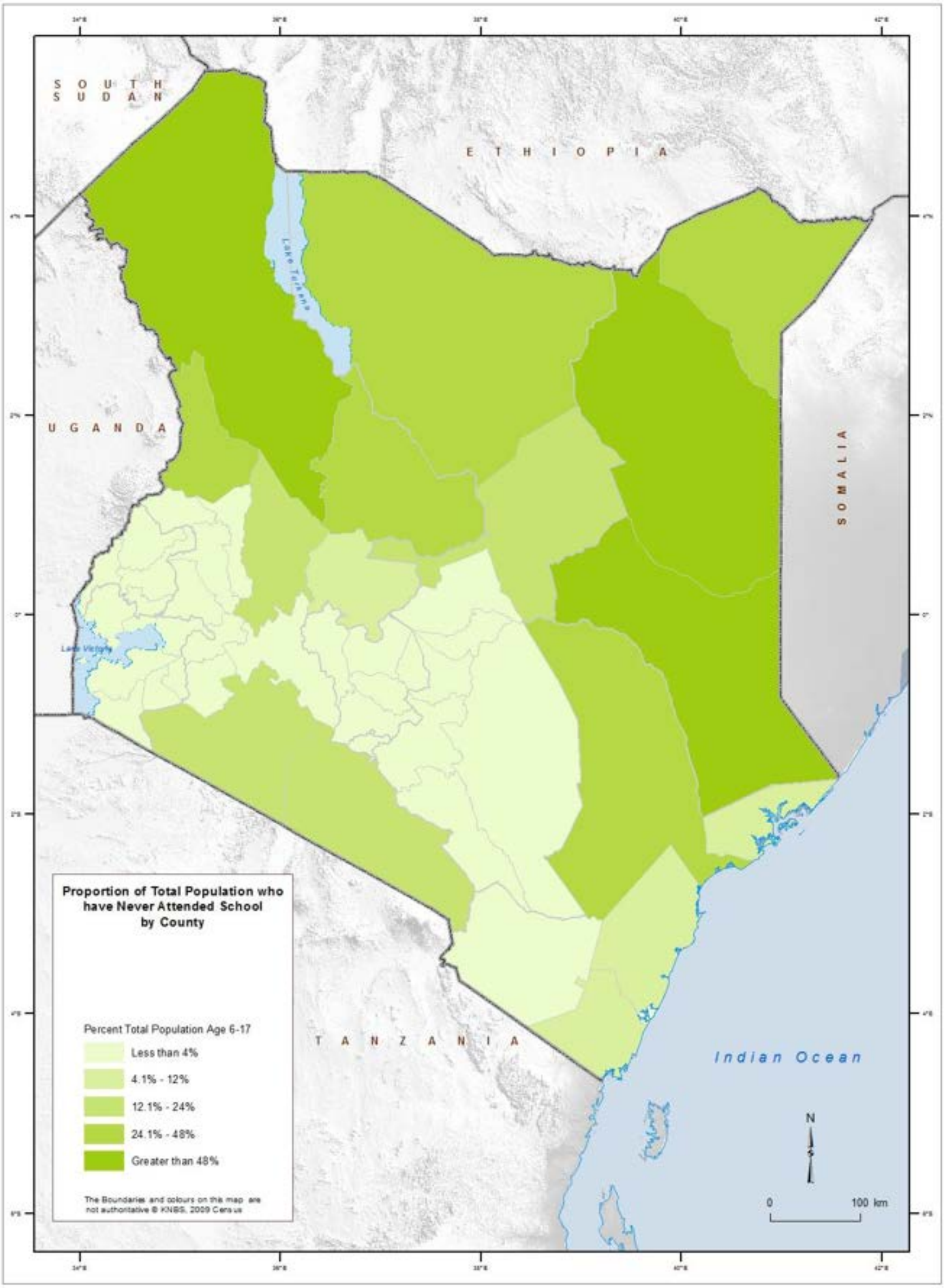
K.8: **B.**





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K.8: C.Total Population Never Attended School Age 6 -17



Section - L: Labour

Activity Status of Kenyan Population

Information on the Labour dynamics is one of the important sources of data for assessing the role of the population of a country in the economic and social development process and particularly, for the measurement of the relationship between employment, and other social and economic characteristics of the economically active population for the purpose of formulating and monitoring employment policies and programmes, income-generating and maintenance schemes, vocational training and other similar programs. Analysis of the Activity Status of the Population found that there were about 20.5 million active persons constituting 63.2 percent of the 32.5 million persons aged 5 years and above. Inactive population was 11.8 million persons, constituting 36.6 percent of the total population aged 5 years and above.

Economically Active Population (15-64)

Economically active population is commonly defined broadly as comprising of all persons above a specific age (15 – 64) of either gender who furnishes the supply of labour for the production of economic goods and services. The Kenya 2009 census defined economically active population as persons aged 15-64 who did any work for at least one hour, had a job or business but were not at work (temporarily absent), or were seeking work during the reference period of last seven days of the census night. The census results indicate that the total number of active population was about 20.5 million people of whom 14.2 million were employed and 1.5 million unemployed. This gives employment rate of 69.3 per cent and unemployment rate of 7.4 per cent.

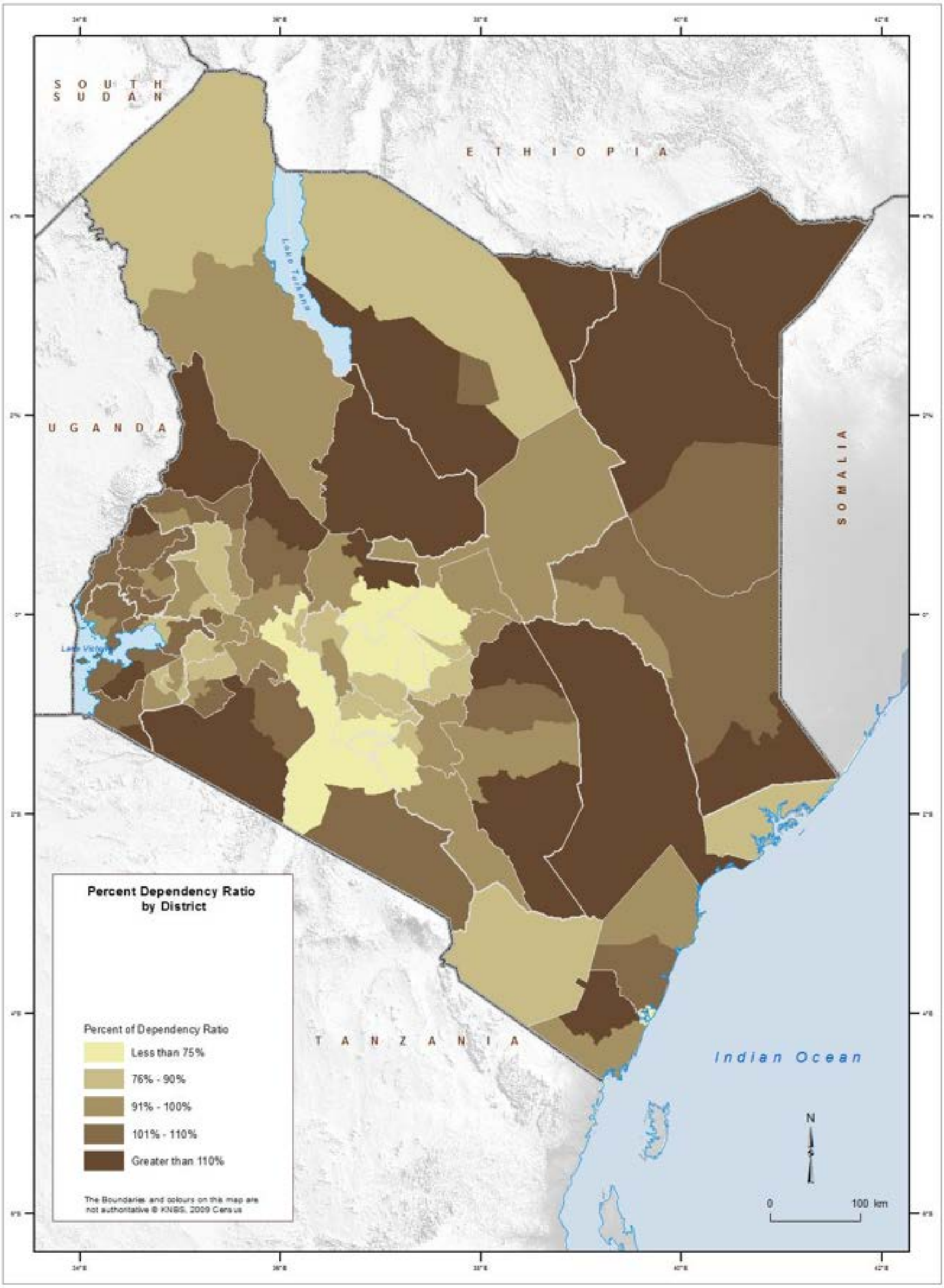
L.1: Dependency Ratios by County

Dependency ratio is defined as the ratio of population under 15 years of age plus persons aged 65 and over to adults aged 15-64 years old. It is a measure of relative burden of persons in the dependent ages in relation to those in the productive ages in a community. Dependency Ratio (DR)= total Children 0-14 years plus old age population 65 years and above divide by the total population 15-64 years and the product multiplied by 100. Any value greater than 100 indicates the weight of dependency per 100 active population. Any value less than 100 indicates less burden to the working population. It is thus a proxy measure of the level of poverty in a population. The index can be computed by sex and age. The dependency map provided is a general one in which there is no disaggregation by sex.

It is observed that dependency problem is greater in rural areas with a ratio of 100.4 compared with urban dependency of 62.7. At the provincial level, North Eastern is leading followed by Western Province and Nyanza. Nairobi has the lowest dependency ratio of 46.1. High economic dependency leads to poverty which is strongly correlated with high fertility.

The spatial pattern of dependency ratios at county level shows that counties in arid and semi-arid regions have very high dependency ratios above 100 per cent. The counties in the Lake Victoria basin also have very high dependency ratios. Otherwise, it is shown that very few counties have low dependency of less than 70 per cent. These counties are Nyeri, Kirinyaga, Kiambu, Thika and Nairobi. Map L.1 shows dependency ratio by district.

L.1: Dependency Ratio by Districts



L.2: Economically Inactive Population

Economically inactive population refers to persons who were neither working nor available/looking for work. Out of 32.5 million of Economically inactive population refers to persons who were neither working nor available/looking for work. Out of 32.5 million of population aged 5 years and above 11.9 million or 36.5 per cent were inactive. Analysis by reasons of inactivity show that full time students had the highest proportions (80 per cent) followed by homemakers who constituted (16.8 per cent). There was an almost even distribution for men and women among full time students for the economically inactive population aged 5 years and above.

The incapacitated constituted 2.5 per cent while the retired persons only accounted for less than one percent of the economically inactive population aged 5 years and above. The table below gives the summary.

Table L.1: Economically Inactive Population by Reason of Inactivity

	Total Inactive Population	Reason for Inactivity							
		Retired		Home Maker		Full Time Student		Incapacitated	
		Men	Women	Men	Women	Men	Women	Men	Women
Total	11,853,862	56,992	29,681	251,354	1,740,533	4,885,806	4,596,234	125,831	167,431

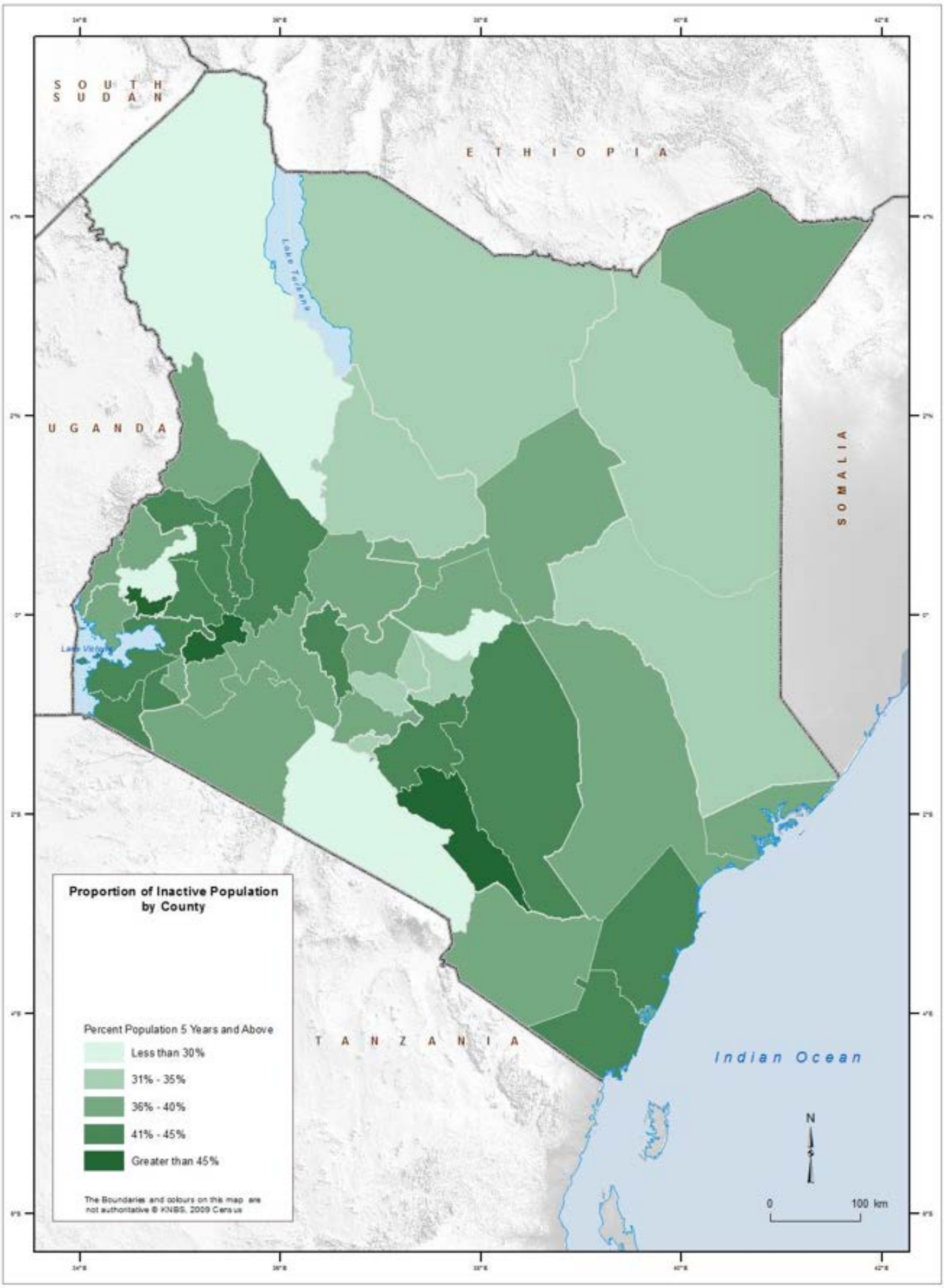
The distribution of economically inactive population by residence, province and sex indicated that rural areas accounted for about 66.4 per cent against the urban share of about 33.6 per cent. Analysis by province indicates that the Rift Valley province accounted for almost a quarter (25.4 per cent) of the economically inactive population. There were more women than men among the economically inactive population aged 5 years and above both in rural and urban areas and in all provinces.

Table L.2: Distribution of Inactive Population by Residence and Sex, 2009

		Total	Male	Female	Percent of Total
		11,853,862	**5,319,983**	**6,533,879**	**100**
	RURAL	7,875,622	3,626,896	4,248,726	66.4
RESIDENCE	URBAN	3,978,240	1,693,087	2,285,153	33.6

Map L.4 presents the details of inactive population by counties. Counties with more than 45 per cent of the inactive population are depicted by dark green while those with less than 30 per cent with light green on map L.2. Those with over 45per cent of inactive population were: Vihiga, Kericho, Makueni and Kwale . Counties with the lowest economically inactive population were: Tharaka, Turkana) and Kajiado with less than 30 per cent.

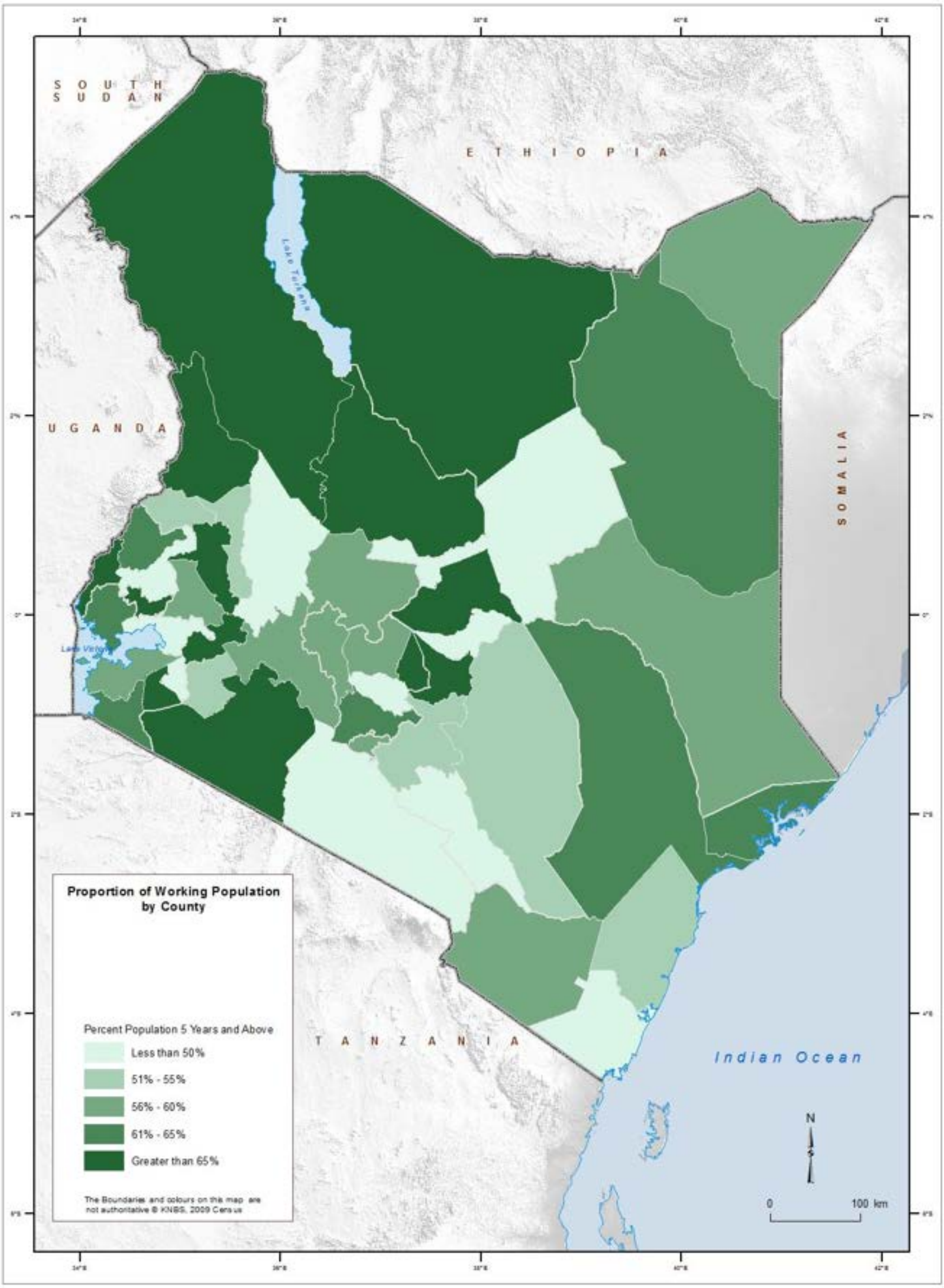
L.2: Inactive Population by County



L.3: Working Population Age 5 Years And Above

Map L.3 provides the proportion of working population aged 5 years and above by county. The results of the 2009 Population and Housing Census show that Rift Valley counties have the highest proportion of working population (over 65 per cent) compared to the national average of 58 per cent. Kericho county is among those with highest proportion of the working population (over 65 per cent) while Kajiado, Tharaka and Baringo are among those with the lowest (less 50 per cent). Pockets falling short of the national average are spread across the country (see light green shade in map L.3:). Counties with the lightest green colour have less than half of their population working.

L.3: Proportion of Working Population by County



L.4: Working Children (5-17 years)

The International Labour Organization (ILO), 2003, defines working children as persons aged 5-17 who perform some non-schooling activities during the reference period. This definition is adopted in Kenya.

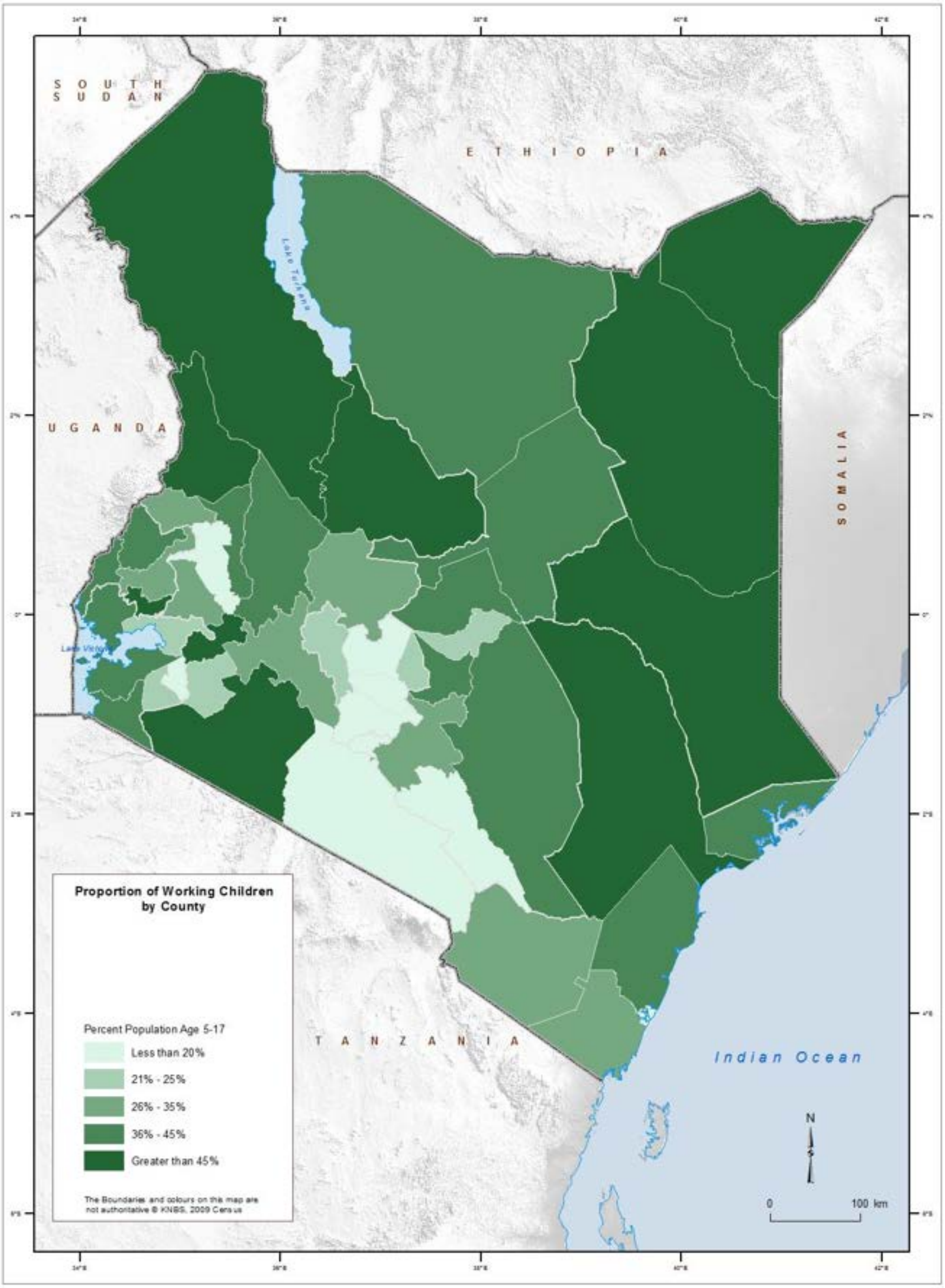
The results of the census show that out of 13.2 million children, 4.6 million children were working of whom 8.5 per cent or 387,815 worked for pay, 2.4 million or, 53.3 per cent worked in own family agriculture holding and 738,506 or 16.2 per cent were in own family business. Although the report indicates that there were 4.6 million working children, not all could be considered as child labour. However, those who were working for pay (8.5 per cent) are considered as child labour. Table below gives the details

Table L.3: Distribution of Working Children by Economic Activity, Age and Sex

Total	Total	Worked for Pay	On Leave	Sick Leave	Own - Family Business	Own - Family Agriculture Holding	Intern/Apprentice	Volunteer
Total	4,552,276	387,815	249,390	249,061	738,506	2,427,271	252,264	247,969
Male	2,351,667	202,726	124,695	124,752	376,429	1,272,003	126,972	124,090
Female	2,200,609	185,089	124,695	124,309	362,077	1,155,268	125,292	123,879

The map L.4 depicts the proportion of working children by county. The darker the green the worse the situation. On average the census results indicate that the proportion of working children constituted 35 per cent. The counties with over 50 per cent of working children were Turkana, Samburu, Garissa, Wajir, West Pokot, Tana River, Mandera, Narok and Kericho. Apart from Kericho which has large tea estates the rest are arid and semi arid areas where children are mostly engaged in herding.

L.4: Proportion of Working Children (5-17 years) by County



L.5: Employed Population

The overall employment rate in 2009 was 69.3 per cent and of the 14.2 million people who were employed, 9.3 million people were in the rural areas constituting 65.3 per cent of the total employed population. Table below gives the details

Table L.4: Employed Population by Gender and Residence

Age	Gender	Total	Rural	Urban
15-64	Total	14,240,789	9,304,595	4,936,194
	Male	7,420,705	4,656,565	2,764,140
	Female	6,820,084	4,648,030	2,172,054

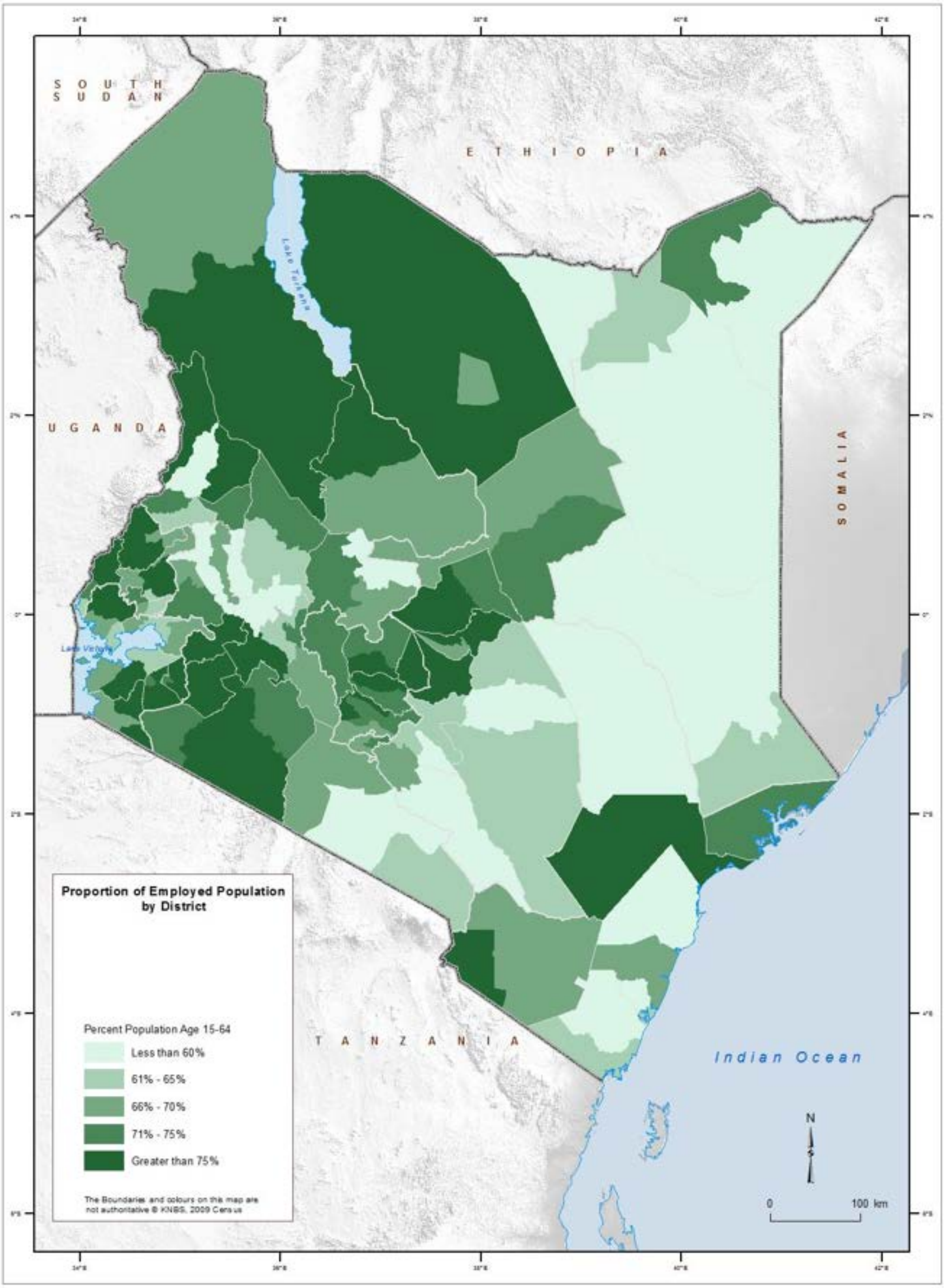
Gender bias in employment still exists as all the regions had proportion of men in employment higher than that of women. Out of the employed population 68 per cent were women of whom 32.6 per cent were in rural areas and 15.3 per cent in urban. The proportion of the youth (population aged 15-30 based on the Kenyan definition) who were employed was 49.0 per cent. This proportion however stands at 27.0 per cent based on the international definition (population aged 15-24years). Distribution of the employed population by the activity status is presented indicate that about 34.1 per cent of the working population 15- 64 years were employed for pay while the proportion that worked in own/family business or own/agricultural business was about 64.2 per cent. The proportion of the employed youth (15-30) who worked for pay was 33.5 per cent. Almost 46 per cent of the youth worked on own/agricultural businesses.

Table L.5: Distribution of employed population age 15-64 by economic activity, and sex, 2009

Age	Gender	Total	Worked for pay	Sick leave	On leave	Own Family business	Own Agriculture Business	Intern	Volunteer
15-64	Total	14,240,789	4,590,866	167,040	100,341	2,656,010	6,494,878	120,290	111,364
	Male	7,420,705	3,101,402	82,024	46,784	1,357,846	2,714,715	60,220	57,714
	Female	6,820,084	1,489,464	85,016	53,557	1,298,164	3,780,163	60,070	53,650

Averagely census results indicate that the country had over 69 of employed population. Districts with over 70 per cent of employed population are those in Mandera, Turkana and along the lake region counties. Most districts in Counties from North Eastern region reported proportion of employed population less than 60 per cent.

L.5: Proportion of Employed Population by Districts



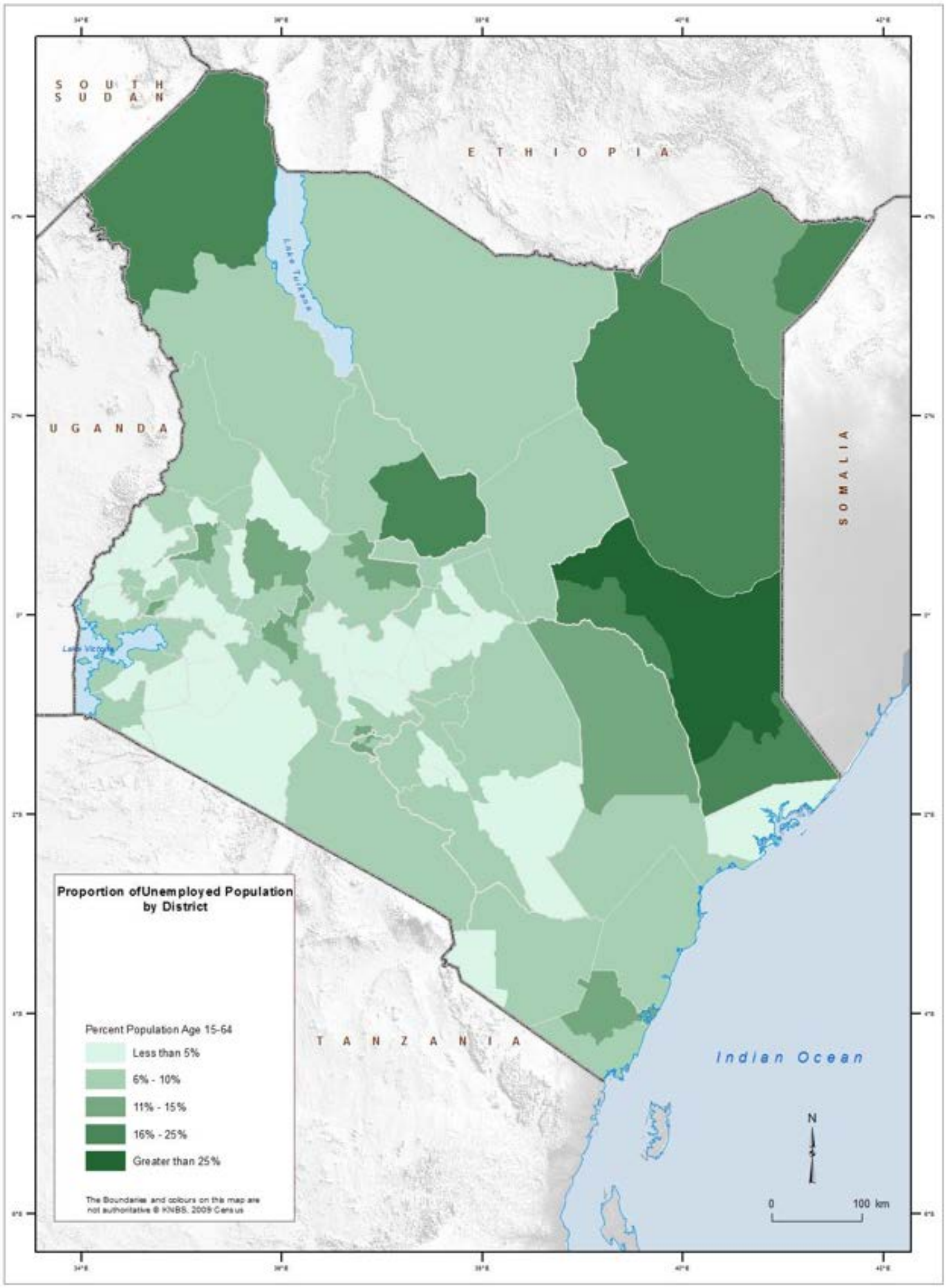
L.6: Unemployed Population

Rising unemployment and increasing poverty has been a critical development concerns in Kenya since independence. Under the strict definition, the unemployed are persons who report to be without work and actively looking for work during the reference week. The analysis for the 2009 census, however adopted the relaxed definition of the unemployed which includes those without work and not looking for work who reported no work available.

The results indicate that the total unemployed persons aged 15-64 were about 1.5 million in 2009. Overall unemployment rate was 7.4 per cent. Of the total unemployed in 2009, about 52.6 per cent were in the rural areas. Females represented 46.2 per cent of the unemployed. The youth, 15- 30 comprised of about 1.1 million of the unemployed. Of these, 49.8 per cent were found in the urban areas.

The analysis presented on map L.6 indicates that the share of unemployed to total unemployed was highest in districts from counties in Rift Valley, Nairobi, and North Eastern regions. The western region counties show least share of the total unemployed is from districts from western province with less than10 per cent. Further analysis of unemployment rate by county indicates that North Eastern region had the highest unemployment rate of over 25 per cent with some of the districts within the province having as high as unemployment rates between 36 per cent to 45 per cent. Urban districts of Nairobi, Mombasa and Eldoret had high unemployment rates ranging from 10 per cent while those with moderately high unemployment rates include Nairobi and Coast regions.

L.6: Unemployment Rate by District



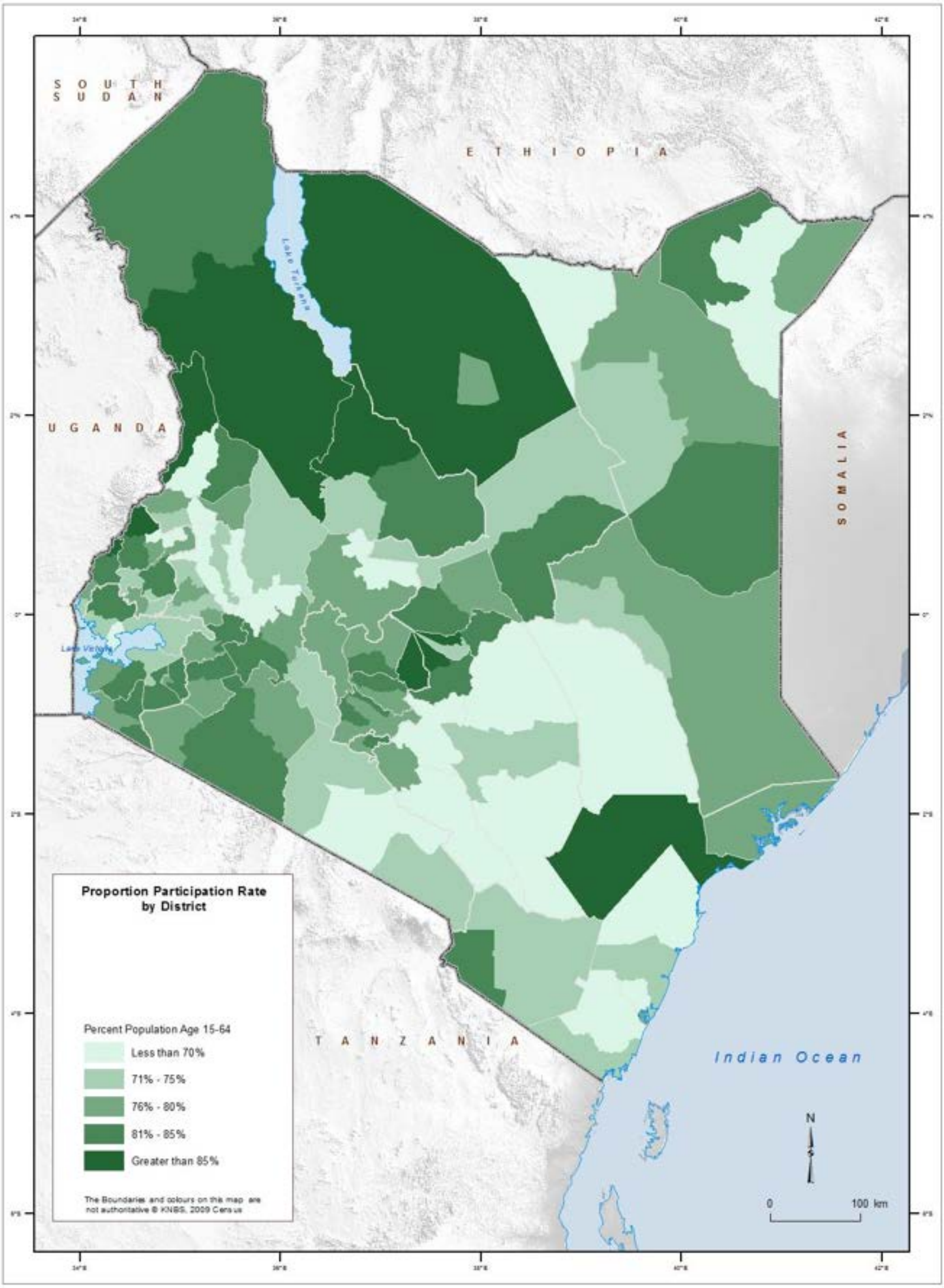
L.7: Labour Force Participation Rate

Labour force participation rate is computed as the proportion of the economically active population to the working age population during the reference period. The overall participation was 76.7 per cent. The highest participation rates were recorded for persons in the age cohorts 35 – 49 averaging around 90 per cent while the lowest was recorded for persons aged 15 – 19 (42.4 per cent). Participation rates for males were higher than those of females in all age cohorts. The participation rate for youth aged 15-30 was 67.6 per cent

The districts shaded dark green on map L.7 shows areas with participation rates of 85 per cent and above which includes Nyandarua South, Kirinyaga, Tana Delta, Chalbi, Laisamis, Meru South, Embu, Mbeere, Turkana, Samburu, Mt Elgon and Teso North.

Across the regions, districts in Nairobi County registered the highest participation rate of 80 per cent. While counties from Central, western and Nyanza regions followed with rates of over 75 per cent. Eastern region had the lowest rate of less than 75 per cent. The districts shaded dark green on map L.7 shows areas with participation rates of 85 per cent and above which includes Nyandarua South, Kirinyaga, Tana Delta, Chalbi, Laisamis, Meru South, Embu, Mbeere, Turkana, Samburu, Mt Elgon and Teso North.

L.7: Participation Rate by District



Section M: Disability

Introduction

Lack of evidence-based data on the nature and extent of disabilities as well as other factors that affect Persons With Disabilities (PWDs) in Kenya has posed challenges in terms of planning for this segment of the population. The available data from small-scale studies and special rehabilitation/educational institutions has never been adequate to give a complete picture of Kenya's PWDs. The Kenya National Survey for Persons with Disabilities (KNSPWD) conducted in 2007 was intended to provide various stakeholders with up-to-date information for planning, monitoring and evaluating activities, programmes and projects geared towards improving the wellbeing of persons with disabilities. KNSPWD was the first comprehensive, nationwide survey to bridge the gaps in the data on the disabled population in Kenya.

The 2009 Census was the fifth census to be carried out after Kenya attained its independence in 1963. The census aimed at providing demographic and socioeconomic data required to inform policy decision-making for Kenya's Vision 2030 as well as ascertain the achievements made in the provision of basic services to the people. Data on disability were collected as part of this important endeavour for the second time in the history of census undertaking in Kenya. The first attempt to collect data on disability was done in the 1989 census, whose data was not analysed.

Since independence, Kenya has had various development plans to improve the welfare of persons with disability. In 1963, the Government identified illiteracy, disease, ignorance and poverty as the main problems to be addressed in order to achieve sustainable national development. The policies focused on empowering disadvantaged groups including women, children and disabled persons. The need for relevant data and information on prevalence and experience of disability has increasingly grown as a result of the need to monitor and evaluate the impact of these policies.

The new constitution promulgated on 27th August 2010 addresses issues pertaining to disability. Chapter 4 article 27 paragraph 4 states that: "the state shall not discriminate directly or indirectly against any person on any ground, including race, sex, pregnancy, marital status, health status, ethnic or social origin, colour, age, disability, religion, conscience, belief, culture, dress, language or birth." Furthermore, chapter 4 article 54 places specific emphasis on the rights of PWDs, i.e. dignity, access to education, access to places, communication, and access to materials and devices to overcome challenges resulting from disability·

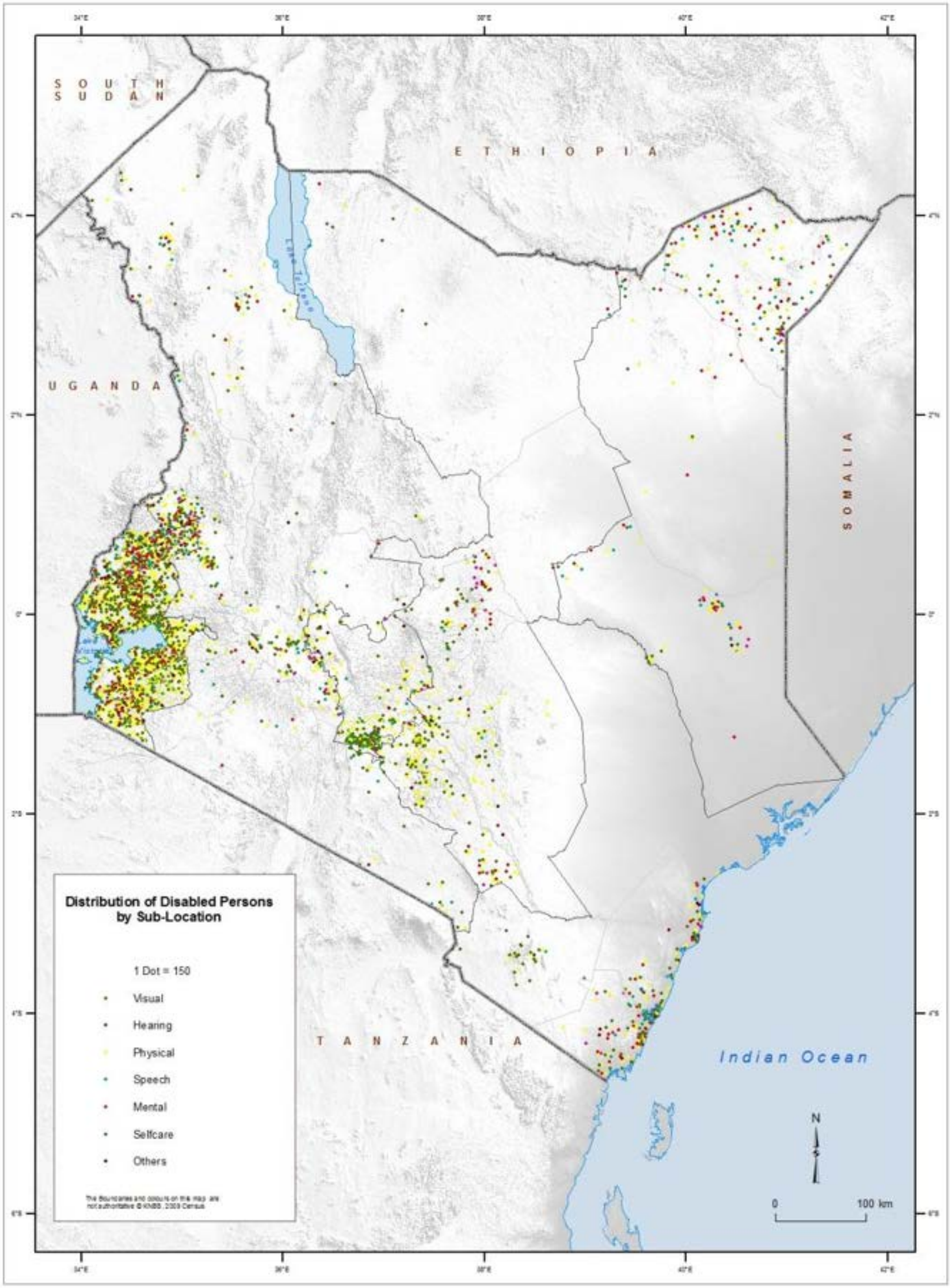
The Persons with Disabilities Act 2003 is an enabling legislation that provides for the rights and rehabilitation of PWDs in order to achieve equalization of opportunities. The Act established the National Council for PWDs, and provides for the rights and rehabilitation of PWDs. A National Policy on Disability was thereafter developed to eliminate disparities in service provision and to ensure that services are available to persons with disability. The policy identifies 21 policy targets and states five principles to guide planning, implementation and monitoring of programmes. The principles espoused in the policy are: equalization of opportunities, a human rights approach to the disability agenda, mainstreaming, accessibility, and gender equity. Full implementation of the Persons with Disability Act and the National Policy on Disability requires reliable and comprehensive data on PWDs, and hence the data from the census is necessary for evidence-based planning and intervention strategies.

The following maps highlight the key findings on disability emanating from the analysis of the 2009 census data.

M.1: Distribution of Persons with Disability by Sub- Location

The map M1 presents the distribution of persons with disability by sub- location. Most of the persons with disability were concretaed around the Lake region, specifically in Nyasnza and western Provinces. These were followed by sub – locations in counties of Kiambu, Machakos, Coast and mandera. There were very few isolated cases of disabilities in counties of Tana River, Lamu and North Eastern. The most prevalent form of disabilities were physical and visual. The least form of disability was selfcare.

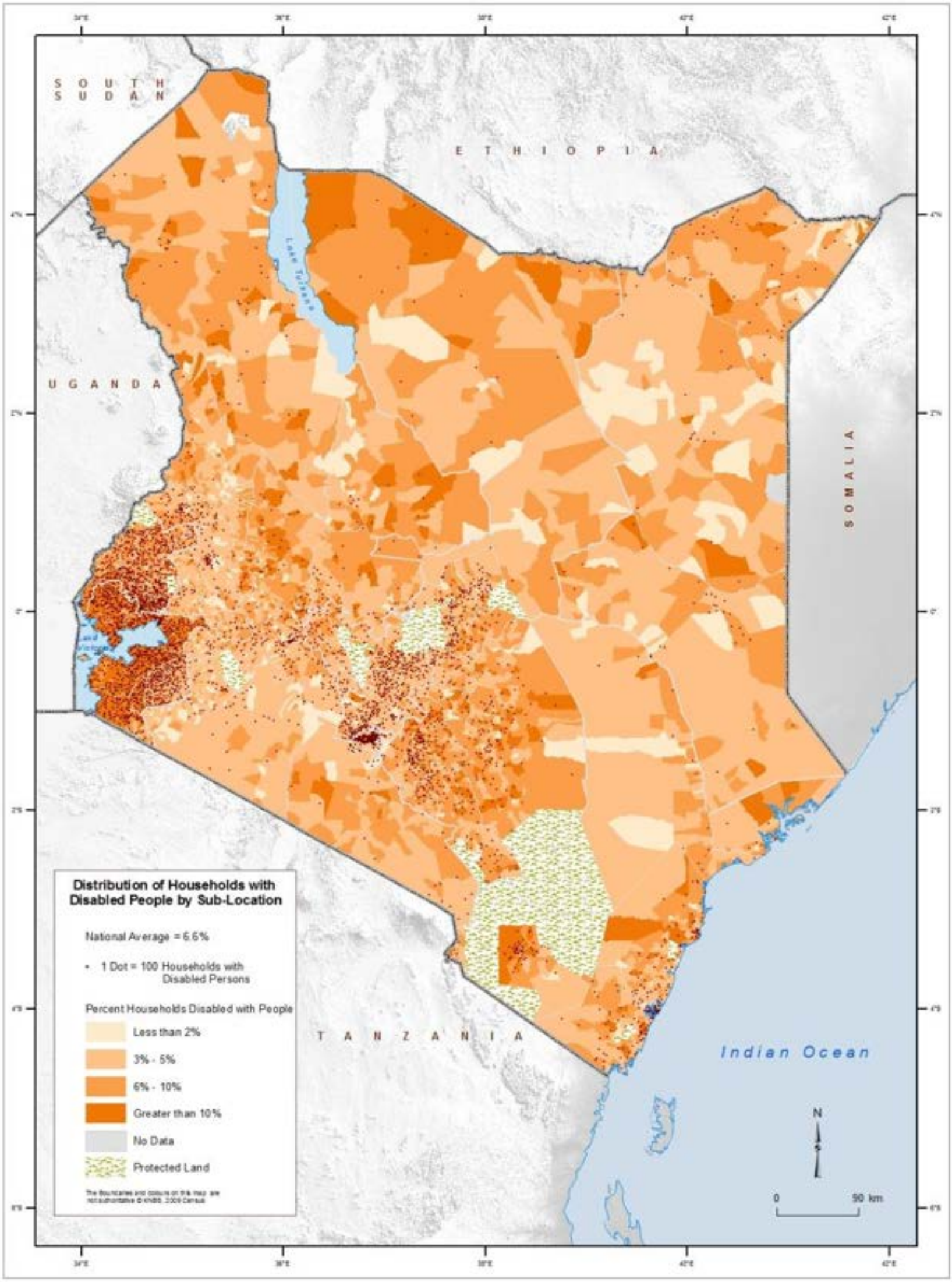
M.1: Distribution of Persons with Disabilities by Sub location



M.2: Distribution of Households with Disabled Persons

The map M2 presents the distribution of persons with disability by households. Most of the persons with disability were concretaed around the Lake region, specifically in Nyasnza and Western Provinces. These were followed by households in counties of Kiambu, Machakos, Coast and Mandera. There were very few isolated cases of disabilities in counties of Tana River, Lamu and North Eastern. The most prevalent form of disabilities were physical and visual. The least form of disability was selfcare.f

M.2: Distribution of Households with Persons with Disability by Sub-location

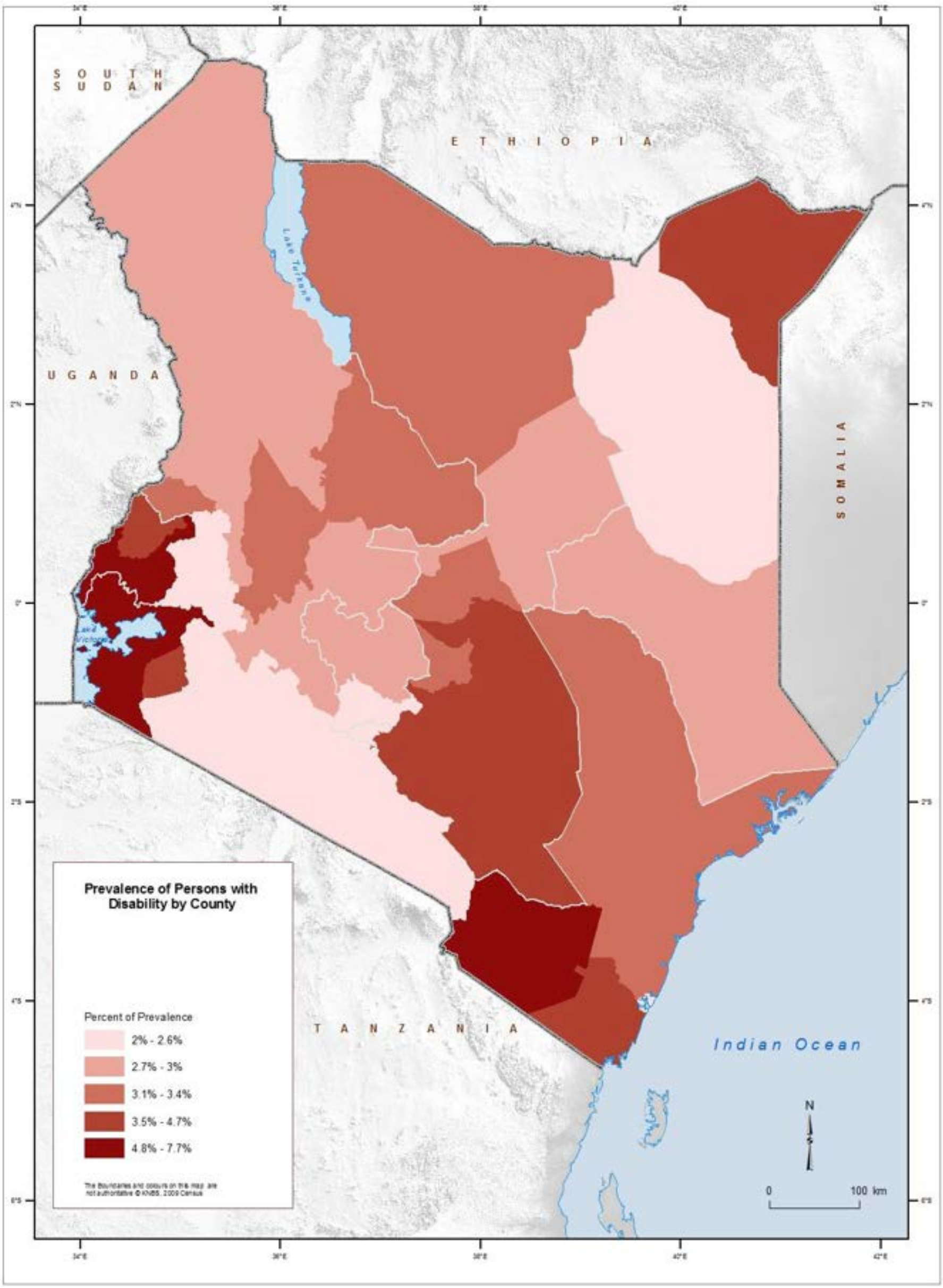


M.3: Total disability

These are persons who have at least some form of disability such as visual, hearing, physical, mental, self care, speech and other disabilities not mentioned. Map M.3 shows that nationally, 3.5 percent of the Kenyan Population had some form of disability and that the highest proportions of disabilities is found in counties around the Lake Victoria region, i.e. in Nyanza and Western Province.

Map M.3shows the proportion of persons with disability by county. The proportion of persons with disabilities in Siaya and Homa Bay counties ranged from 6.3 percent to 7.7 percent. These were closely followed by all counties in Western Province; Kisii and Kisumu counties in Nyanza; and Taita Taveta County in Coast Province with proportions ranging from 4.2 percent to 6.2 percent. Further the map shows that Kitui, Machakos, Makueni, Tharaka, Marsabit and Mandera had proportions ranging from 3.4 percent to 4.1 percent. Counties with least proportions of persons with disability (2 percent to 2.6 percent) were Wajir, Kajiado, Narok Bomet Kiambu, Nakuru, Kericho, Uasin Gishu and Kericho.

M.3: Proportion of Persons with Disabilities by County

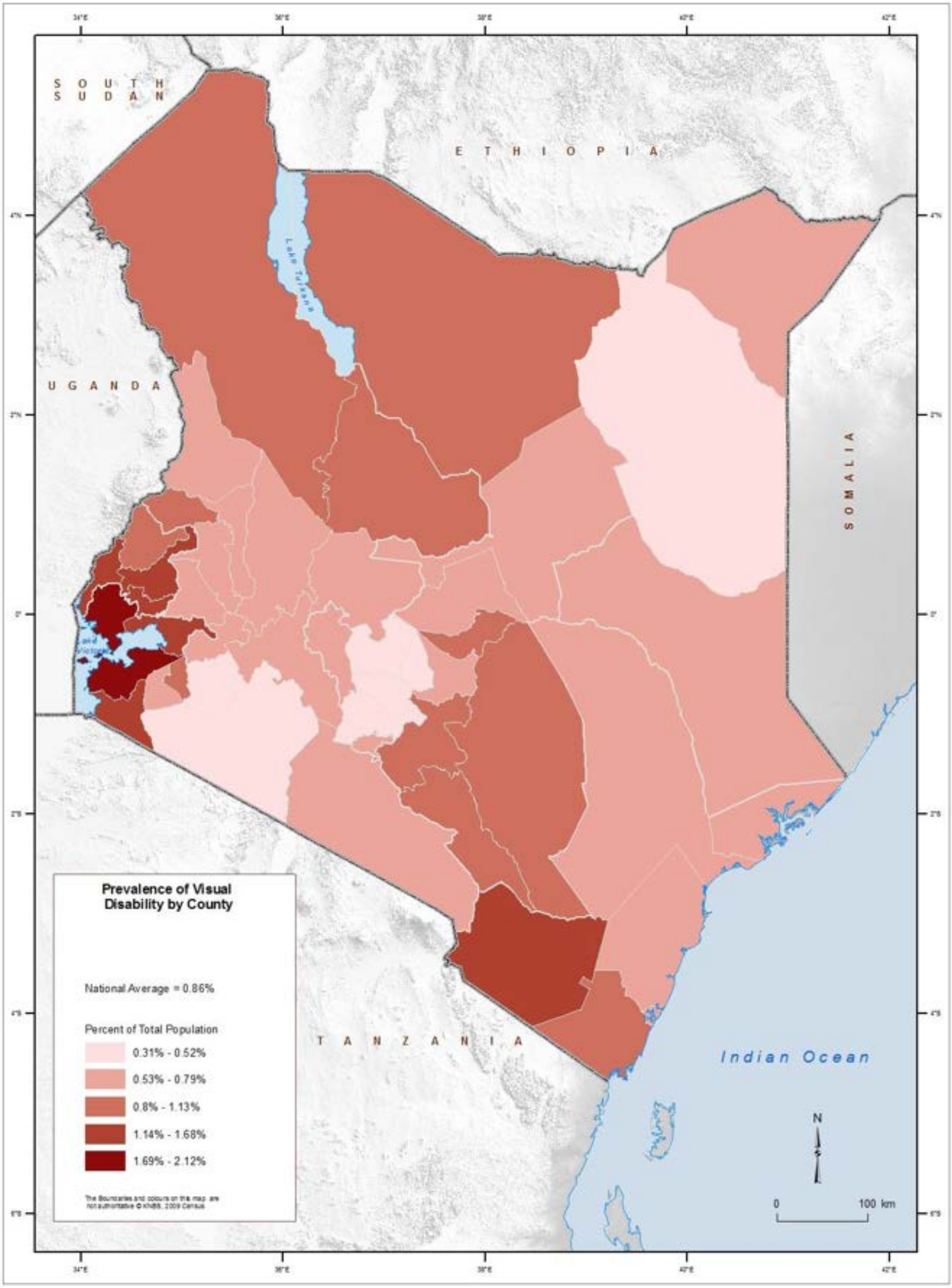


M.4: Visual impairment

Visual impairment describes the various degrees of vision loss ranging from low vision to total blindness. Low vision is generally defined as an uncorrectable visual impairment that interferes with a person's ability to perform everyday activities even with the aid of glasses and contact lenses. "Total blindness" is the complete absence of vision and light perception.

Map M.4 shows a national average of visual impairment of 0.86 percent. Most of the visual impairment is concentrated around the Lake region. Siaya and Homa Bay counties had the highest proportions of persons with visual impairment ranging from 1.69 percent to 2.12 percent areas shaded dark brown. These were followed by Kisumu, Migori Vihiga, Kakamega, Busia and Taita Taveta counties which had a range of 1.14 percent to 1.68 percent . Counties with least proportions of persons with visual impairment ranged from 0.31 percent to 0.52 percent included Wajir, Narok, Bomet, Kiambu, Murang'a, Nyeri and Kirinyaga.

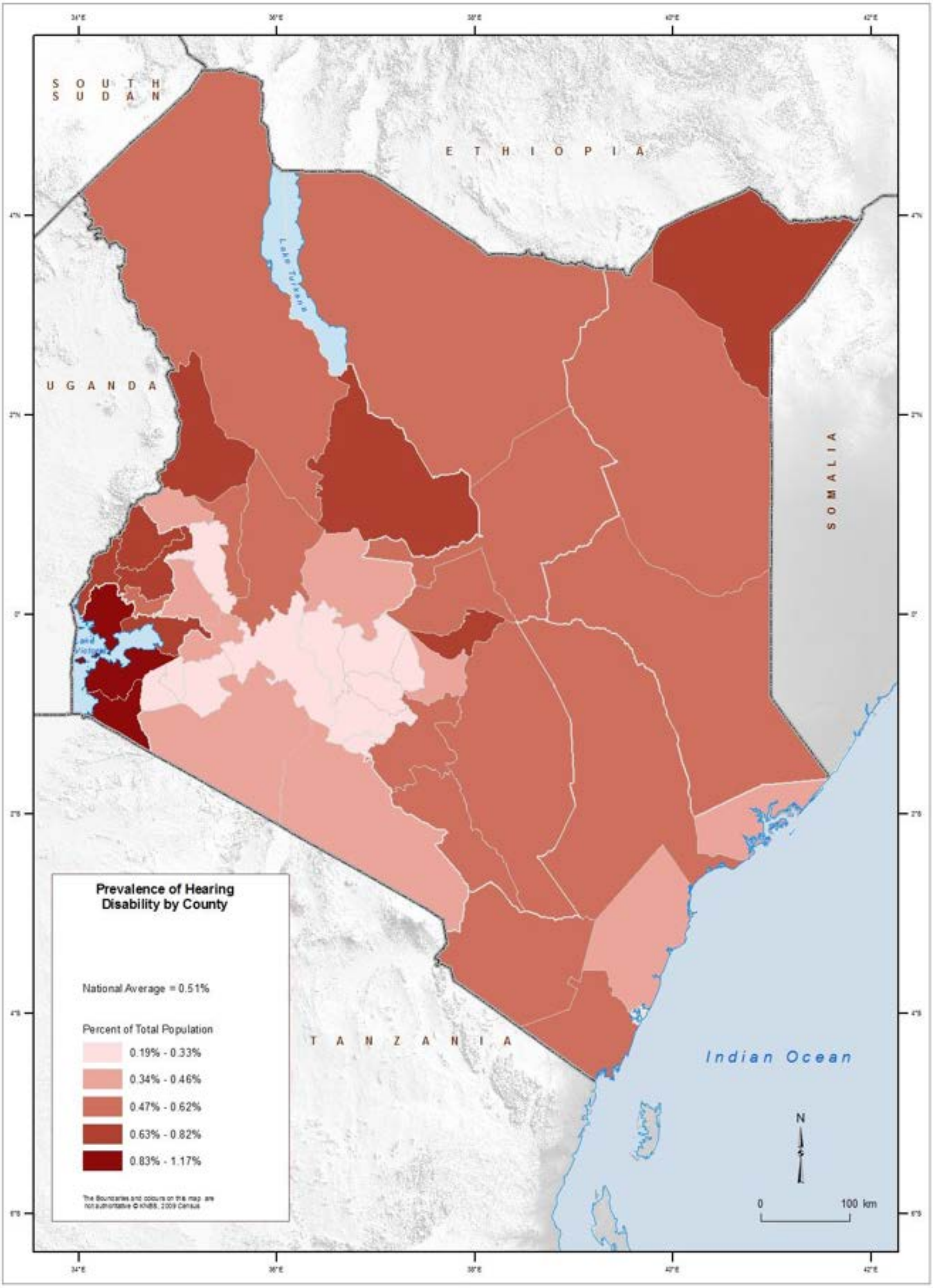
M.4: Proportions of Persons with Visual impairment by County



M.5: Hearing impairment

Hearing impairment refers to people who are either completely deaf or have partial hearing in one or both ears such that one is not able to perform activities of daily life. Map M.5 shows that the proportions of persons with hearing impairment was also noted to be highest amongst the counties around Lake Victoria region. Migori, Homa Bay and Siaya had the highest proportion of persons with hearing impairment ranging from 0.83 percent to 1.17 percent against the national average of 0.51 percent. These were followed by Bungoma, West Pokot, Kisumu, Busia, Kakamega, Mandera, Samburu and Tharaka counties at a range of 0.63 percent to 0.82 percent. Counties with least proportions of hearing impairment included Uasin Gishu, Kisii, Nyamira, Bomet, Nakuru, Nyandarua, Nyeri, Muranga , Kiambu, Nairobi and Kirinyaga and are shown by light pink colour on map. Their proportions ranged from 0.19 percent to 0.33 percent.

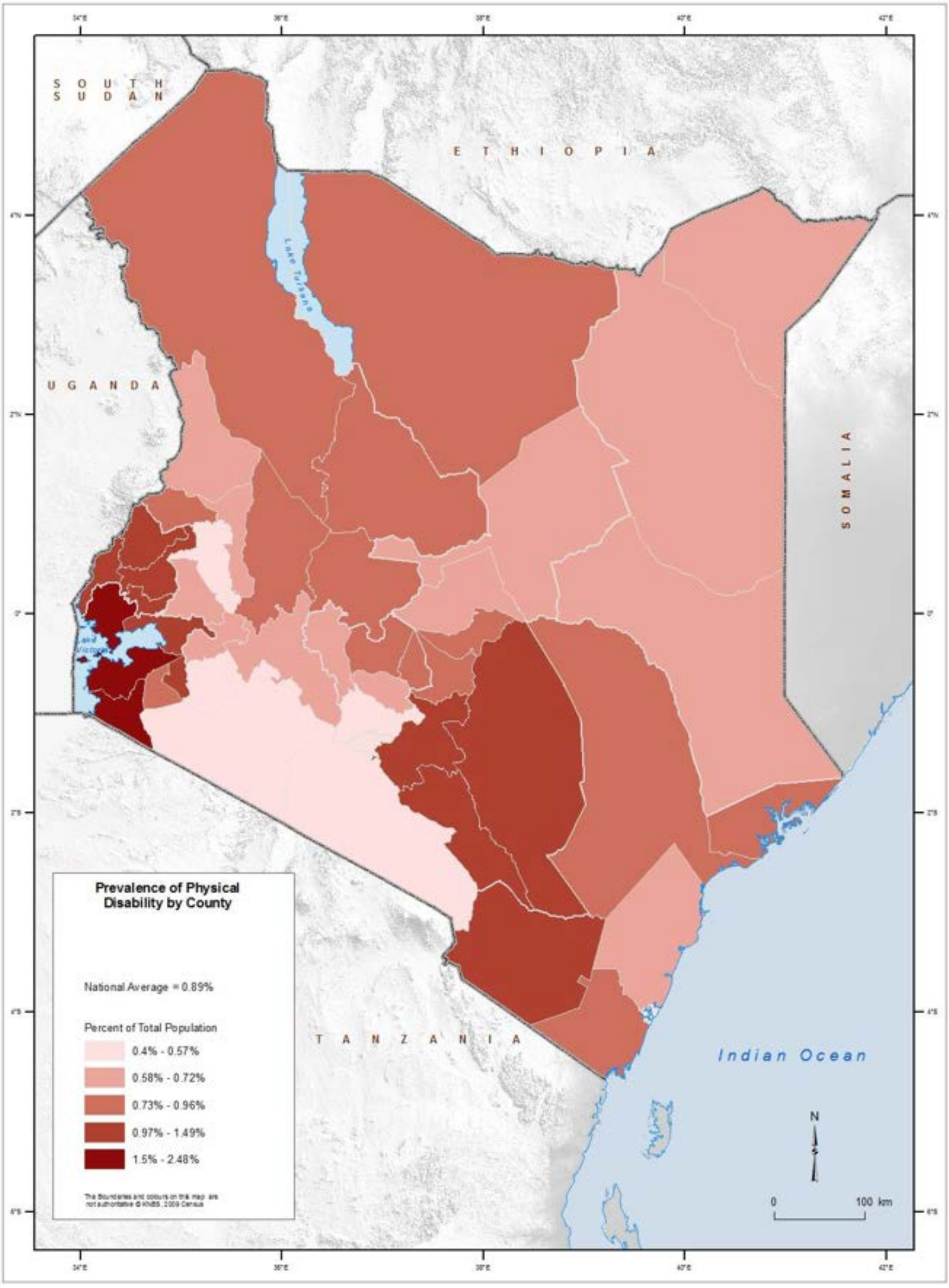
M.5: Proportions of Persons with Hearing impairment by County



M.6: Physical Disability:

This refers to difficulties in moving one or more body parts (i.e. walking, climbing stairs, using hands, and sitting upright, and standing or moving body segments). As indicated in other forms of disabilities, Map M.6 shows that the area around the Lake Victoria region was dominated with high proportions of persons with physical disabilities. Migori, Homa Bay and Siaya had a range of 1.5 percent to 2.48 percent of the proportions of persons with physical disabilities against the national average of 0.89 percent. These were followed by Busia, Bungoma, Kakamega, Vihiga, Kisumu, Nyamira , Taita taveta, Kitui, Makueni, and Machakos counties which had a proportions of 0.97 percent to 1.49 percent. The counties with least proportions were Kajiado, Narok, Bomet, Nairobi, Kiambu and Uasin Gishu at a range of 0.4 percent to 0.57 percent shaded light pink on map M.6.

M.6: Proportion of Persons with Physical Disability by County

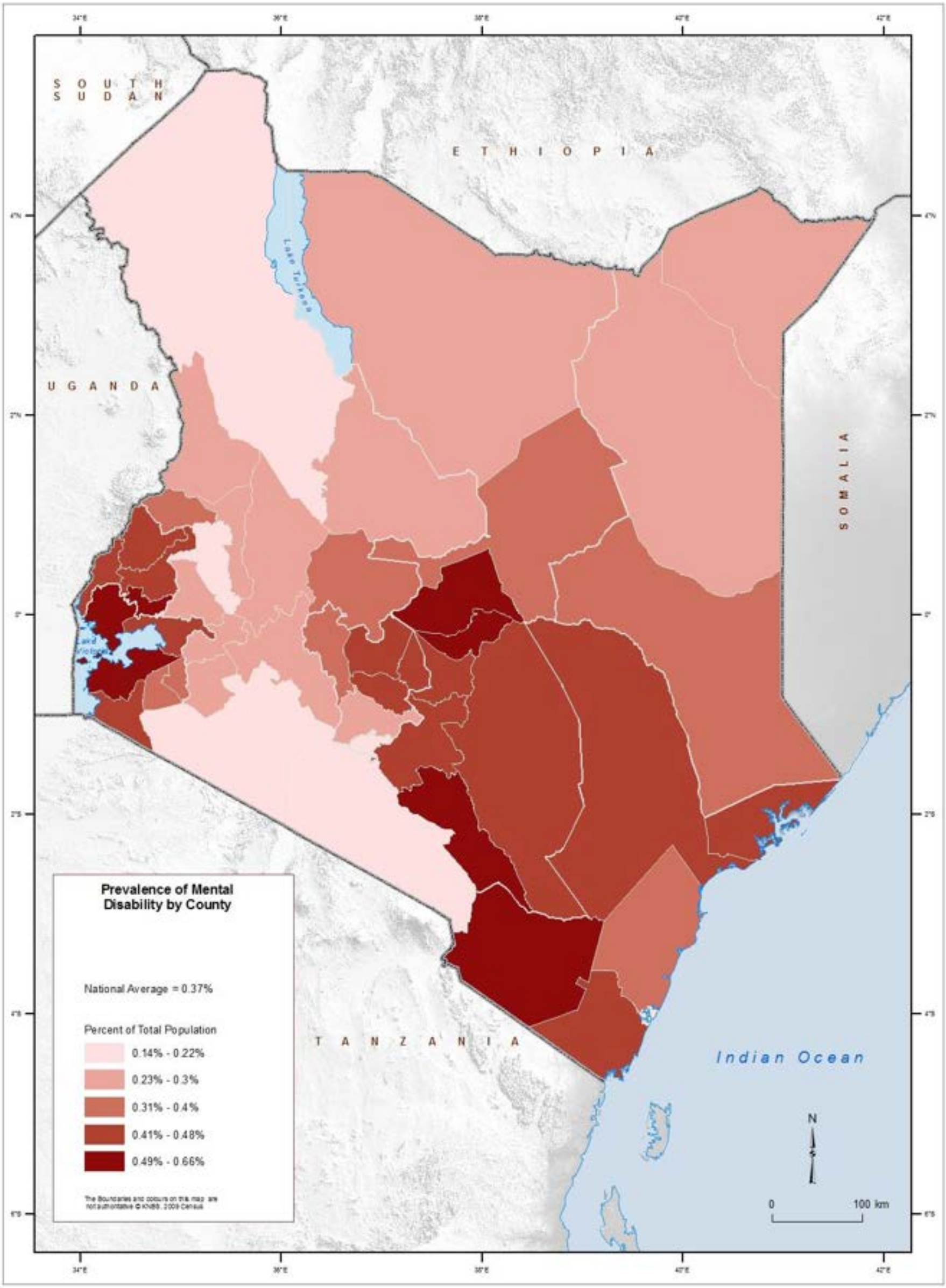


M.7: Mental Disability:

Mental disability affects people's ability to perform activities like other people of similar age groups. Mentally disabled persons may have difficulties remembering things or concentration on what he or she is performing. It includes many different functions including our abilities to pay attention, learn and retain information, solve problems, and use language to express thoughts. This disability hampers clear thoughts in the mind and provides reluctance to conceptualization. It also exhibits problems in comprehending any new ideas or opinions or finding solutions and therefore restrains a person from learning or even co-coordinating function / activities. Even if the person understands or learns something, this disability will bar the person to retain information or skill it for a long time.

Map M.7 shows that mental disabilities were concentrated around the Lake Victoria region, Coast and Meru regions (see the dark brown colour on map M.7). The highest proportions were found to be in Homa Bay, Siaya, Vihiga, Meru, Tharaka, Makueni and Taita Taveta. These ranged from 0.49 percent to 0.66 percent as compared to the national average of 0.37 percent. These counties were closely followed by counties of Lamu, Tana River, Kitui, Machakos, Embu, Kirinyaga, Nyeri, Murang'a, Migori, Busai, Bungoma, Kakamega and Kisumu which had a range of 0.41 percent to 0.48 percent. The Turkana, Uasin Gishu, Narok, Kajiado counties had the least proportion of persons with of mental disabilities ranging from 0.14 percent to 0.22 percent.

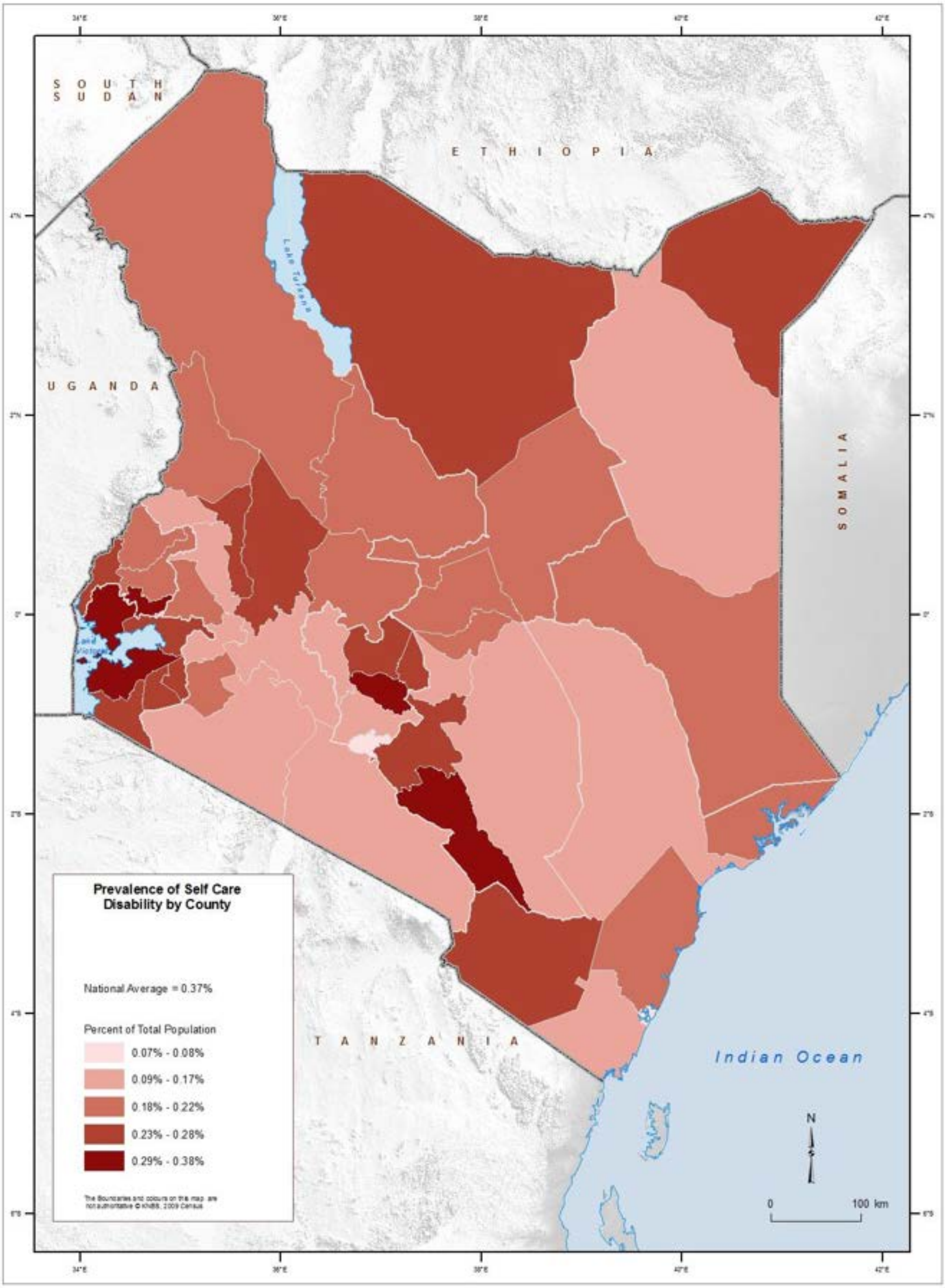
M.7: Proportion of Persons with Mental Disability by County



M.8: Self care difficulties

Refers to persons who have difficulties performing Activities of Daily Living (ADLs) like dressing, bathing, eating, grooming and hygiene, toileting or getting around inside the home. Self-care difficulties may arise out of and may be present in most disabilities. Map M.8 shows that proportions of persons with self care difficulties with a national average of 0.37 percent. Siaya, Vihiga, Homa Bay, Makueni and Murang'a counties had the highest proportions of persons with self – care difficulties at 0.29 percent to 0.38 percent areas shaded dark brown on map M.8. These were followed by Marsabit, Mandera, Baringo, Elgeo Marakwet, Busia, Kisumu, Migori, Kisii, Nyamira and Taita Taveta at arrange of 0.23 percent to 0.28 percent. The least affected county was Nairobi at 0.07 percent to 0.08 percent shaded light pink.

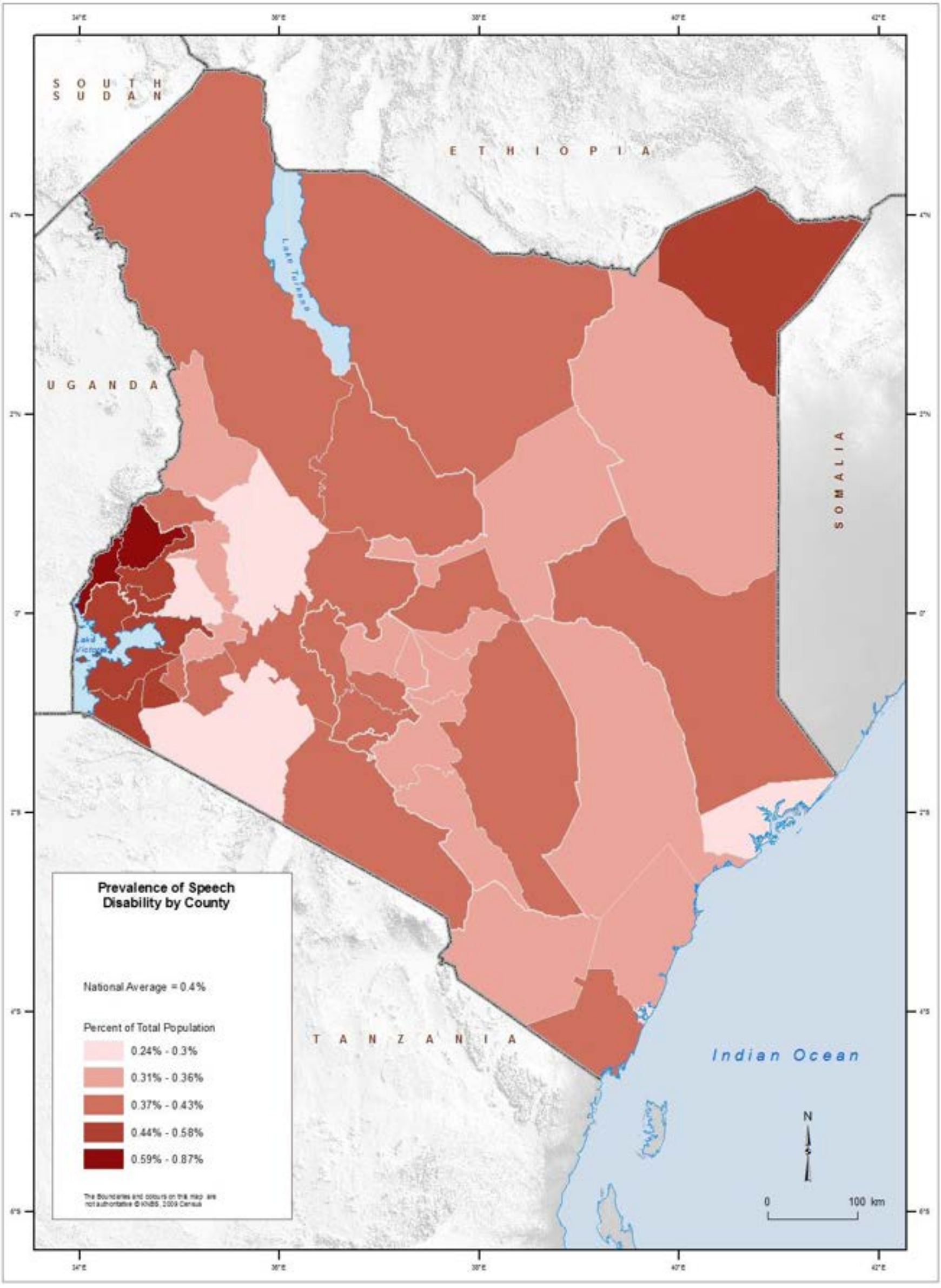
M.8: Proportion of Persons with Self care difficulties by County



M.9: Speech impairment

This refers to problems in communication or difficulties in producing oral speech sounds or problem of speaking. Persons suffering from speech impairment might be characterized by delays and disorders ranging from simple sound substitutions to the inability to use the oral-motor mechanism for functional speech. Map M.9 shows the proportions persons with speech impairment disabilities. Only two counties of Busia and Bungoma had the highest proportions persons with speech impairment at 0.59 percent to 0.87 percent compared to the national average of 0.4 percent. These were followed by counties of Siaya, Kakamega, Vihiga, Kisumu, Homa Bay, Migori, Kisii and Mandera at a range of 0.44 percent to 0.58 percent. Counties with the least proportions of speech impairment included Lamu, Narok, Nandi, Elgeyo Marakwet and Baringo with a range of 0.24 percent to 0.3 percent.

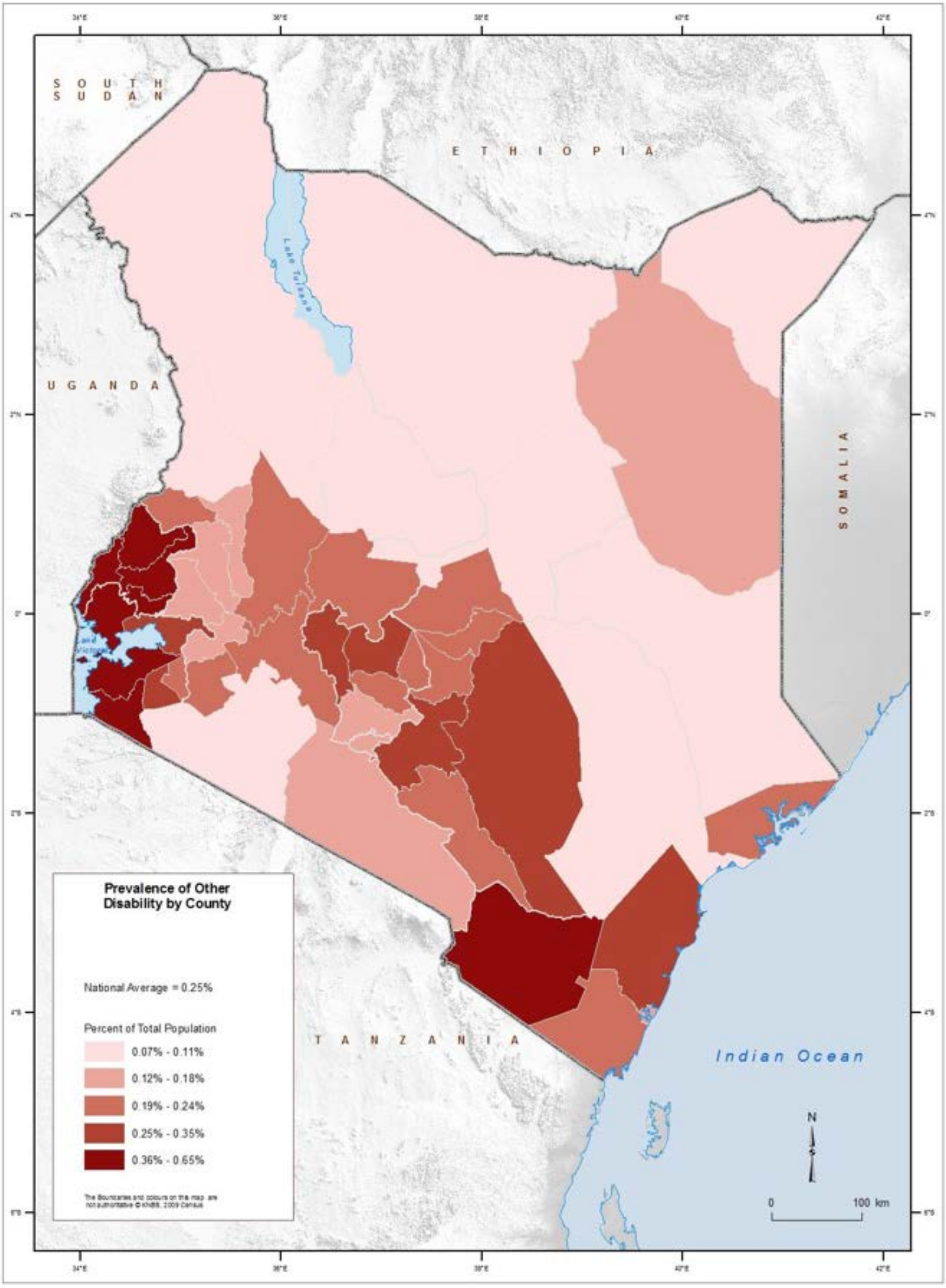
M.9: Proportions of Persons with Speech Impairment County



M.10: Other forms of disabilities

The other forms of disabilities covered under “other” include albinism, epilepsy cerebral palsy, autism, learning difficulties and multiple disabilities. Map M.10 shows the prevalence of other forms of disabilities. The data shows that the highest proportions persons with these disabilities are also found around the Lake Victoria region and part of Coast Province. Migori, Homa Bay, Siaya, Vihiga, Bungoma, Busia and Siaya had the highest proportion ranging from 0.36 percent to 0.65 percent compared to the national average of 0.25 percent. These were followed by Kilifi, Kitui, Machakos, Nyri, Nyandarua, Kisii and Kisumu. The least counties with other forms of disabilities were found in Arid and Semi- Arid areas of Turkana, Marsabit, Mandera, Wajir, Garissa, Isiolo, Samburu, West Pokot and Narok counties ranging from 0.07 percent to 0.11 percent.

M.10: Proportion of Persons with Other forms of disabilities by County



Section N: Gender Dimensions

Introduction

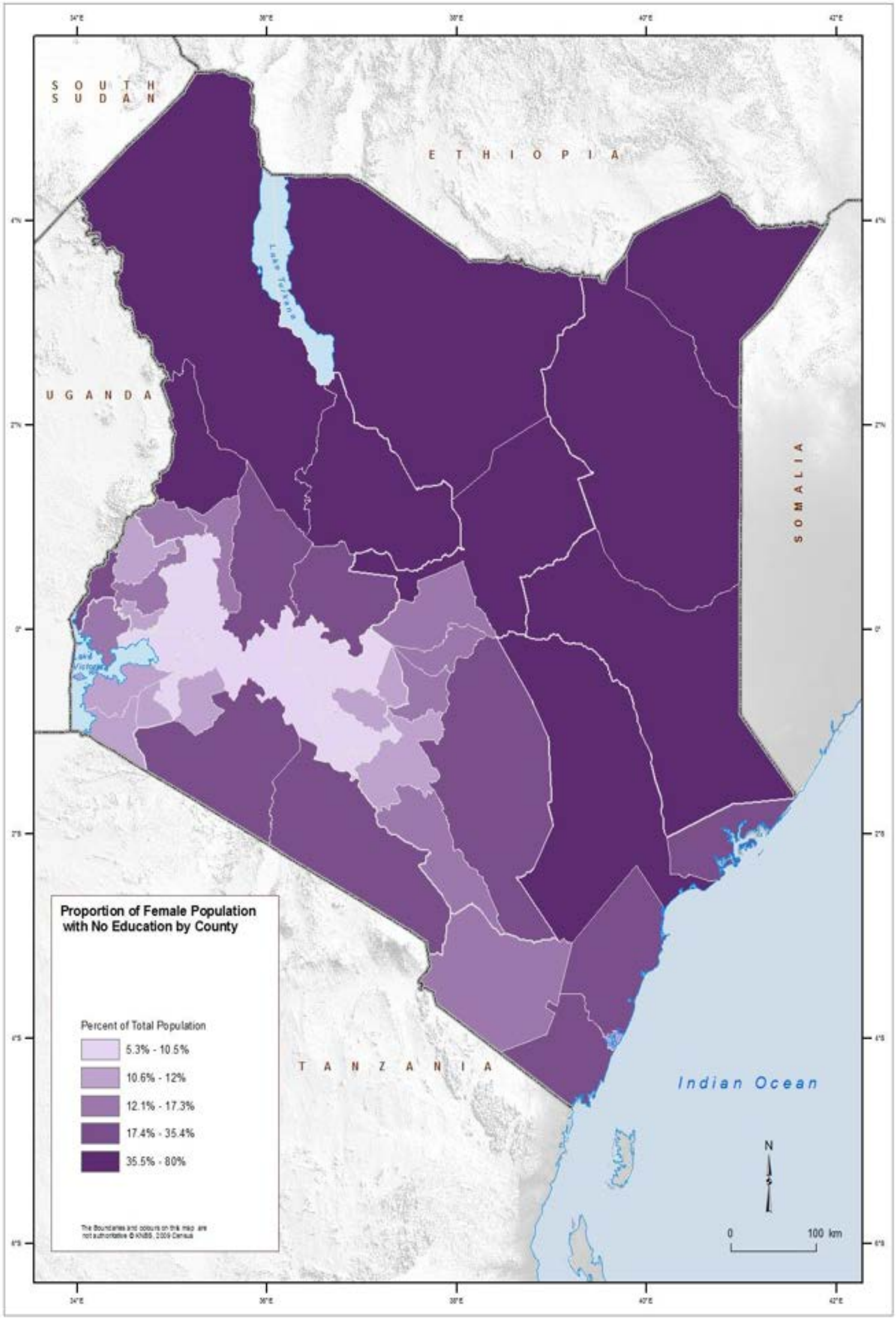
Gender has several definitions. It usually refers to a set of characteristics that are considered to distinguish between male and female, reflect one's biological sex, or reflect one's gender identity. It refers to social construct that defines roles undertaken by women, men, girls and boys. Gender can also be defined as 'the relations between men and women, both perceptual and material. Gender is not determined biologically, as a result of sexual characteristics of either women or men, but is constructed socially. It is a central organizing principle of societies, and often governs the processes of production and reproduction, consumption and distribution. Despite this definition, gender is often misunderstood as being the promotion of women only. However, as we see from the definition, gender issues focus on women and on the relationship between men and women, their roles, access to and control over resources, division of labour, interests and needs. Gender relations affect household security, family well-being, planning, production and many other aspects of life. The gender issues cut across all aspects of life.

In this section only three issues are tackled namely: Gender in education, Inactive population by gender and Unemployment by gender.

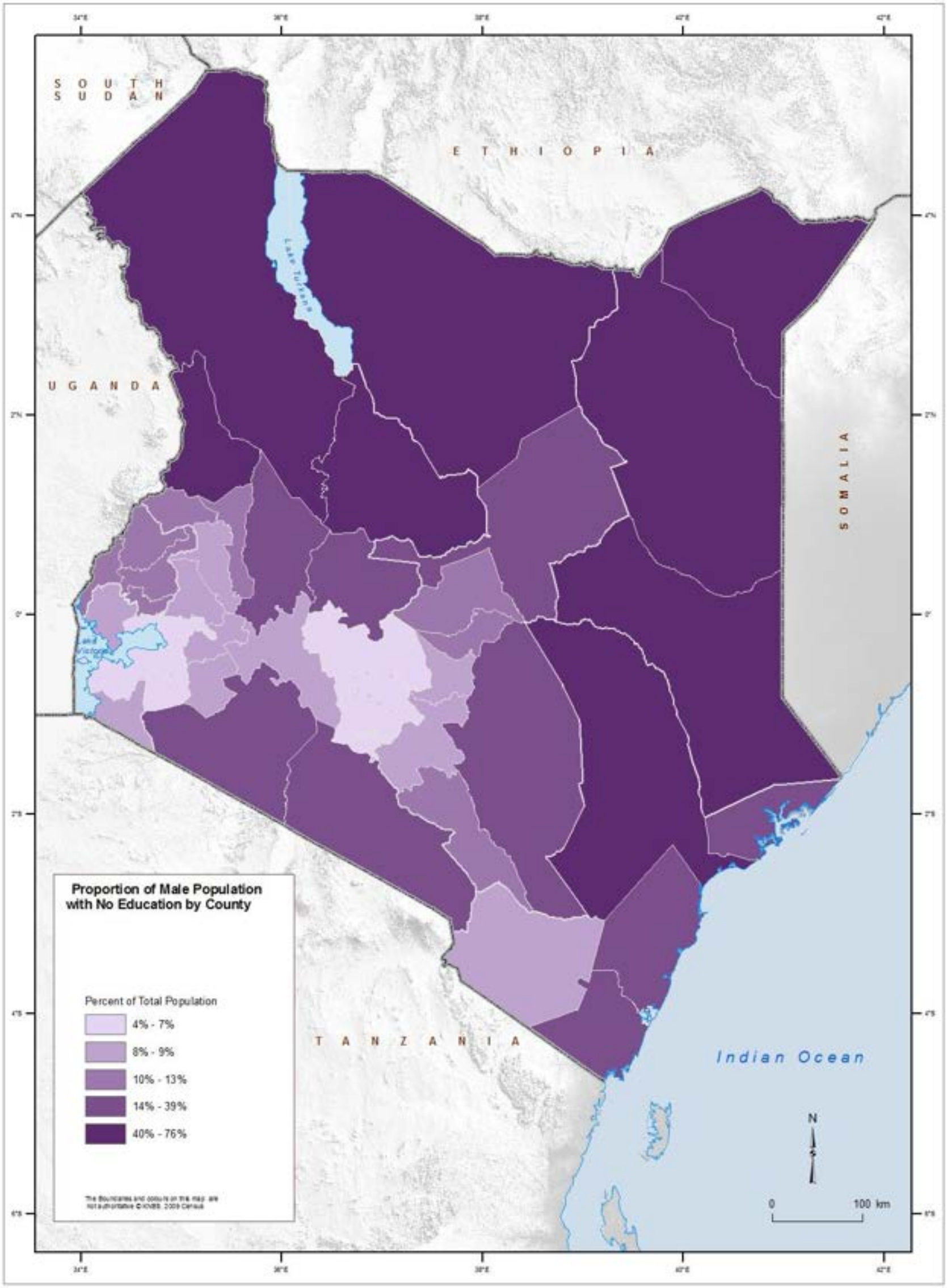
N.1: Proportion of the Population with No Education by Sex and County

Achieving gender parity at every level of education is a key requirement of the MDGs. In education, the MDGs require countries to provide a complete primary education for all children by 2015, reduce adult illiteracy and achieve gender parity at all levels of education by 2015. Maps N.1.A and N.1.B present the proportion of female and male respectively with no education. There is almost near gender parity for the proportion of the population with no education in the counties of Turkana, Marsabit, Wajir, Mandera, Garissa, Samburu and West Pokot in the range of 36.5 percent to 80.0 percent for female and 40.0 percent to 76.0 percent for the male. However, fewer males than females have no education in the counties of Isiolo, Narok and Kajiado in the range of 17.4 percent to 35.4 percent. Counties with low proportion of the population with no education and with almost gender parity are Nairobi, Kiambu, Nyamira and Kisumu in the range of 4.0 percent to 7.0 percent for male and 6.3 percent to 10.5 percent for female. Kirinyaga, Muranga, Nyandarua, Kericho, Uasin Gishu, Nandi counties had fewer males than females with low proportion of the population with no education. The two maps therefore suggest that fewer male than female have no education especially in the arid and semi-arid counties. The female are therefore disadvantaged in terms of access to education. The gender gap needs to be narrowed through continuous promotion of girl child education by implementing better policies on education.

N.1: A.Proportion of Females with No Education by County



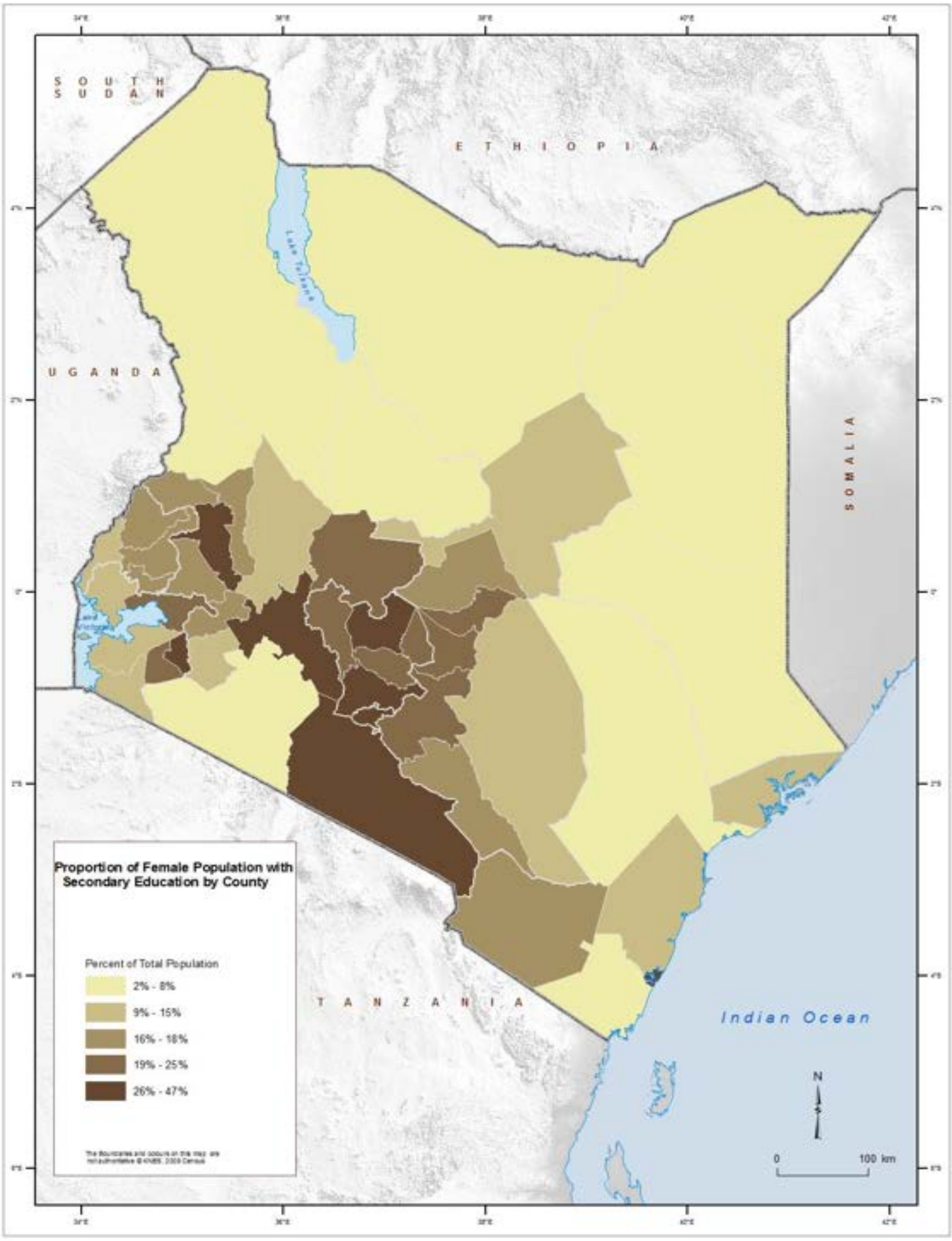
N.1: B.Proportion of Males with No Education by County



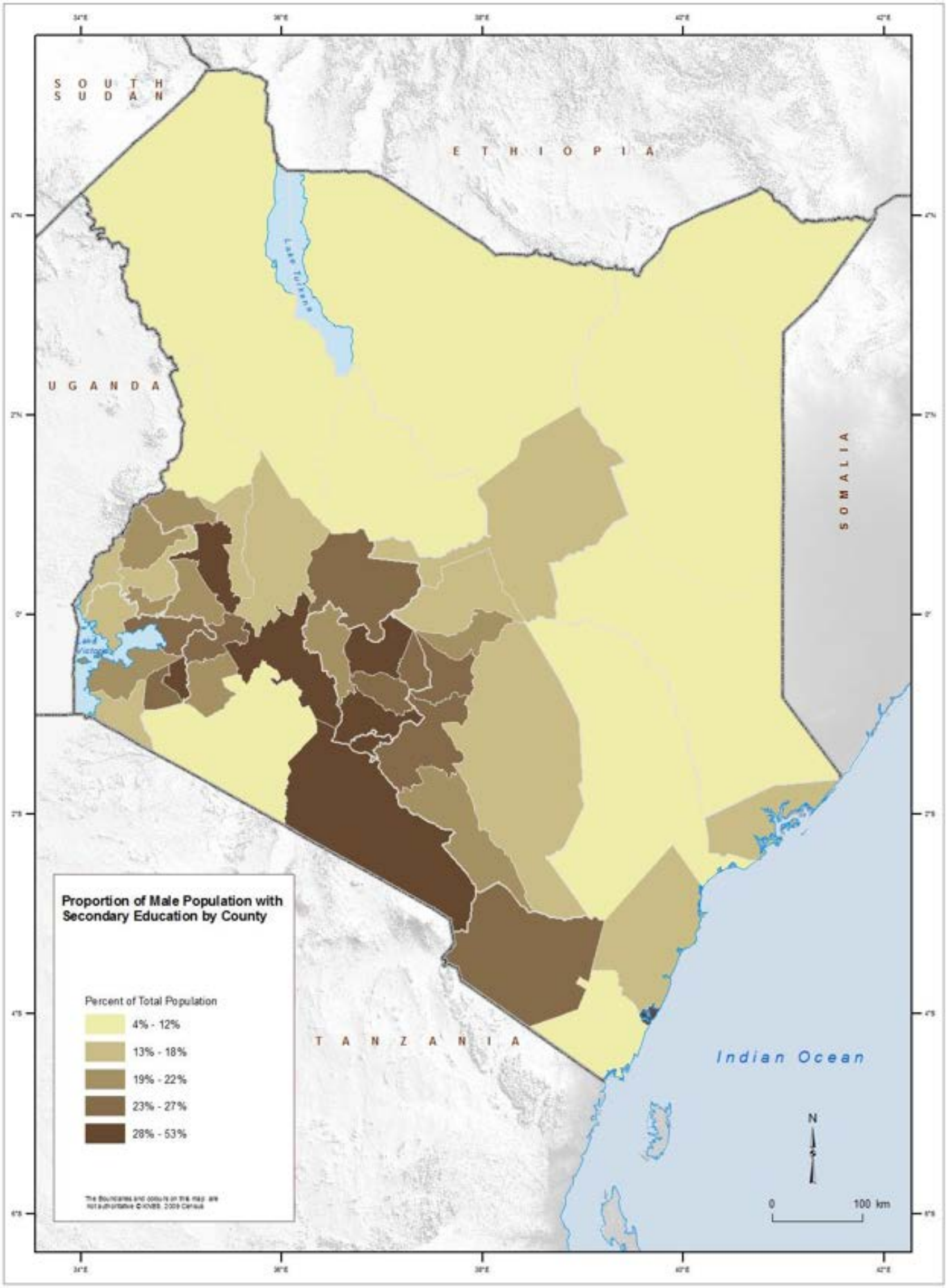
N.2: Proportion of the Population with Secondary and above Level of Education by Sex

Spatial distribution of the population with secondary and above level of education by sex and county is presented in Maps N.2.A and **B.**The counties with least proportion of their population with secondary and above level of education are Turkana, Marsabit, Mandera, Wajir, Garissa, Tana River, Kwale, Narok and Samburu. Female proportion of the population with secondary and above is in the range of 2.0 percent to 8.0 percent while their male counterpart is in the range of 4.0 percent and 12.0 percent. The highest proportion of the population with secondary education and above are Kajiado, Nandi , Kiambu, Nakuru, Kisumu, Nyamira, Uasin Gishu, Nyeri and Mombasa in the range of 26.0 percent to 47.0 percent for females and 28.0 percent to 53.0 percent. There was gender disparity in the proportion of the population with secondary education and above level of education. Female were more disadvantaged than male. A wide regional disparity in the population with secondary and above level of education existed across the counties with arid and semi-arid counties registering low attainment of secondary and above level of education.

N.2: A.Proportion of Females with Secondary Education and Above by County



N.2: B.Proportion of Males with Secondary Education and Above by County

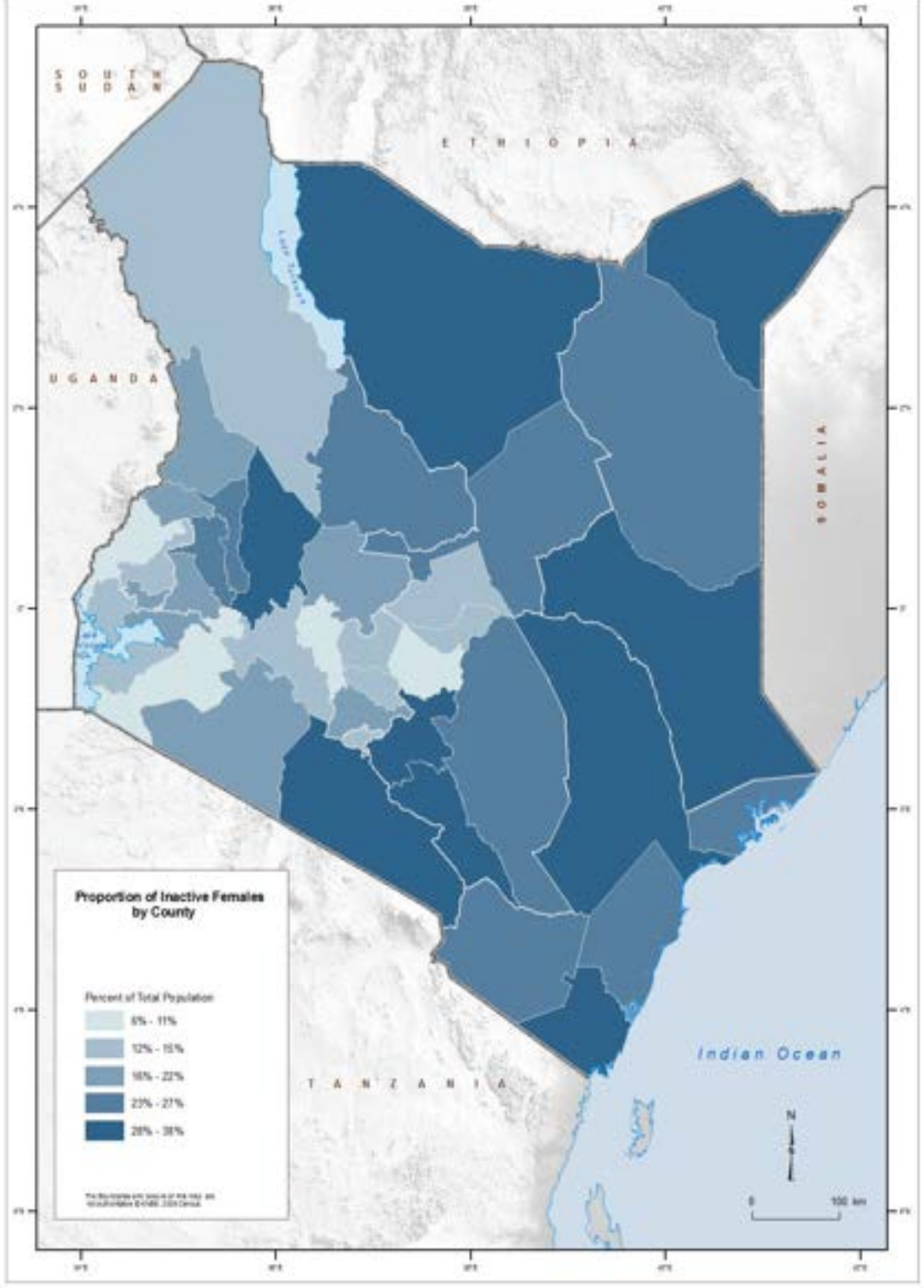


N.3: Proportion of Inactive Population by Sex and County

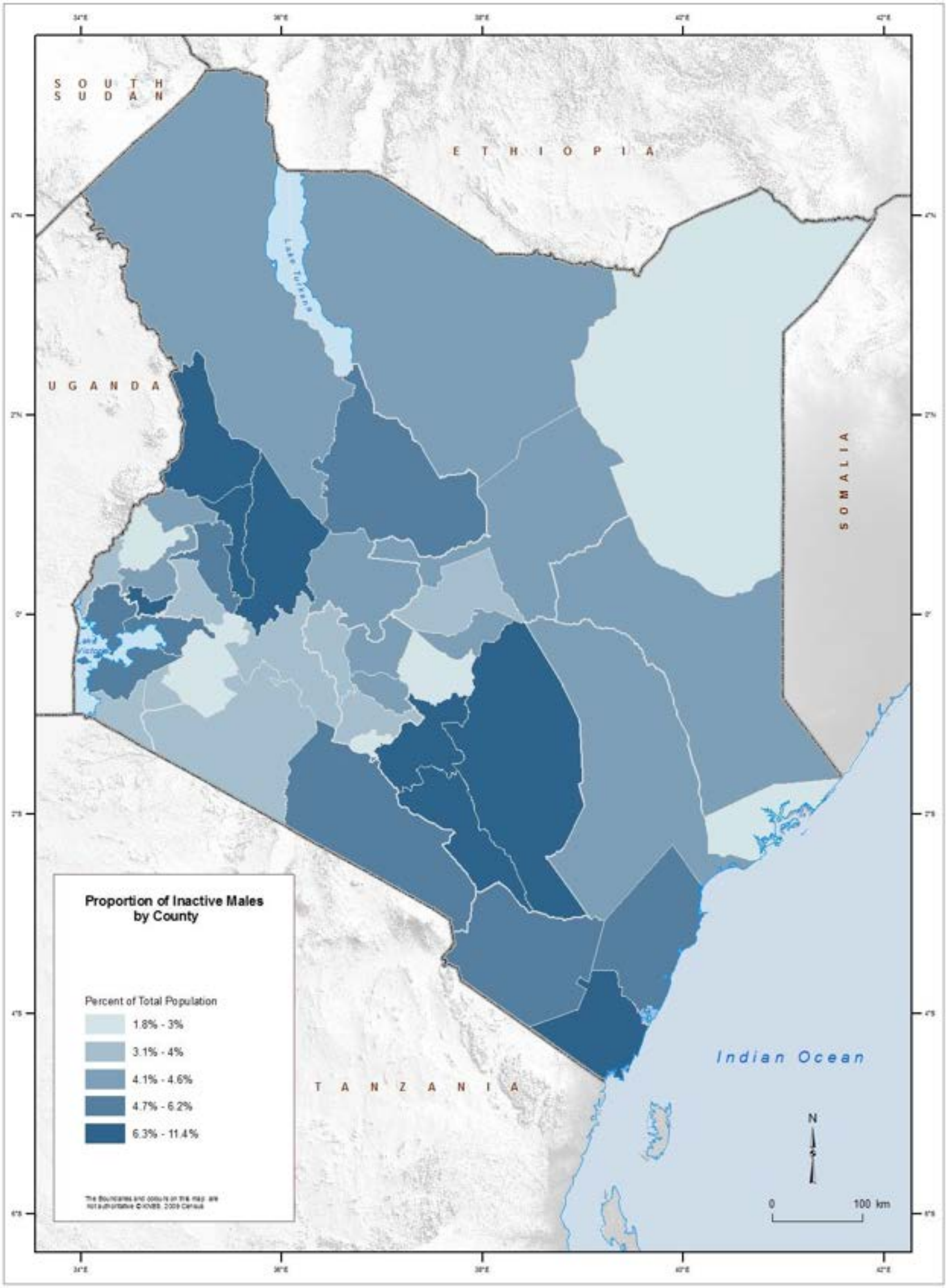
The economically inactive population is categorized into; retired, full time students, homemakers and incapacitated. The females dominated the economically inactive population in all Counties. Maps N.3 A and B present the proportion of inactive female and male by county. Counties with very high proportion of inactive females in the range of 28.8 percent to 38.0 percent are Mandera, Marsabit, Garissa, Tana River, Kwale, Kajiado, Machakos, Makueni and Baringo. On the other hand, counties with highest proportion of inactive males in the range of 6.3 to 11.4 percent are Machakos, Makueni, Baringo, West Pokot and Elgeyo Marakwet. The proportion of inactive male population is lower than the female when the two ranges are compared. The proportion of the female inactive population is attributed to their involvement in non-economic activities such as household chores, homecare services and other household related activities which are not valued economically. The female are therefore disadvantaged since they are involved in activities which are not gainfully recognized but socially important

Majority of the counties with least proportion of inactive female and male population are those which are considered to be in high agricultural production areas and more developed. The counties with less than 15.0 percent of the proportion of inactive females are Nairobi, Nyeri, Kiambu, Muranga, Nakuru, Nyandarua, Kirinyaga, Siaya, Busia, Kakamega, Migori, Kisii, Nyamira, Homa-Bay, Meru, Embu and Tharaka while counties with less than 4.0 percent of the proportion of inactive males are Wajir, Mandera, Lamu, Mombasa, Narok, Kericho, Meru, Nairobi, Nakuru, Kiambu, Nyandarua, Embu and Bungoma. The gender gap in terms of the proportion of inactive population is wide in favour of males. There is therefore need to encourage women to engage in gainful employment and share out some of their social roles in order to narrow the gender gap.

N.3: A.Proportion of inactive Females by County



N.3: B.Proportion of inactive Males



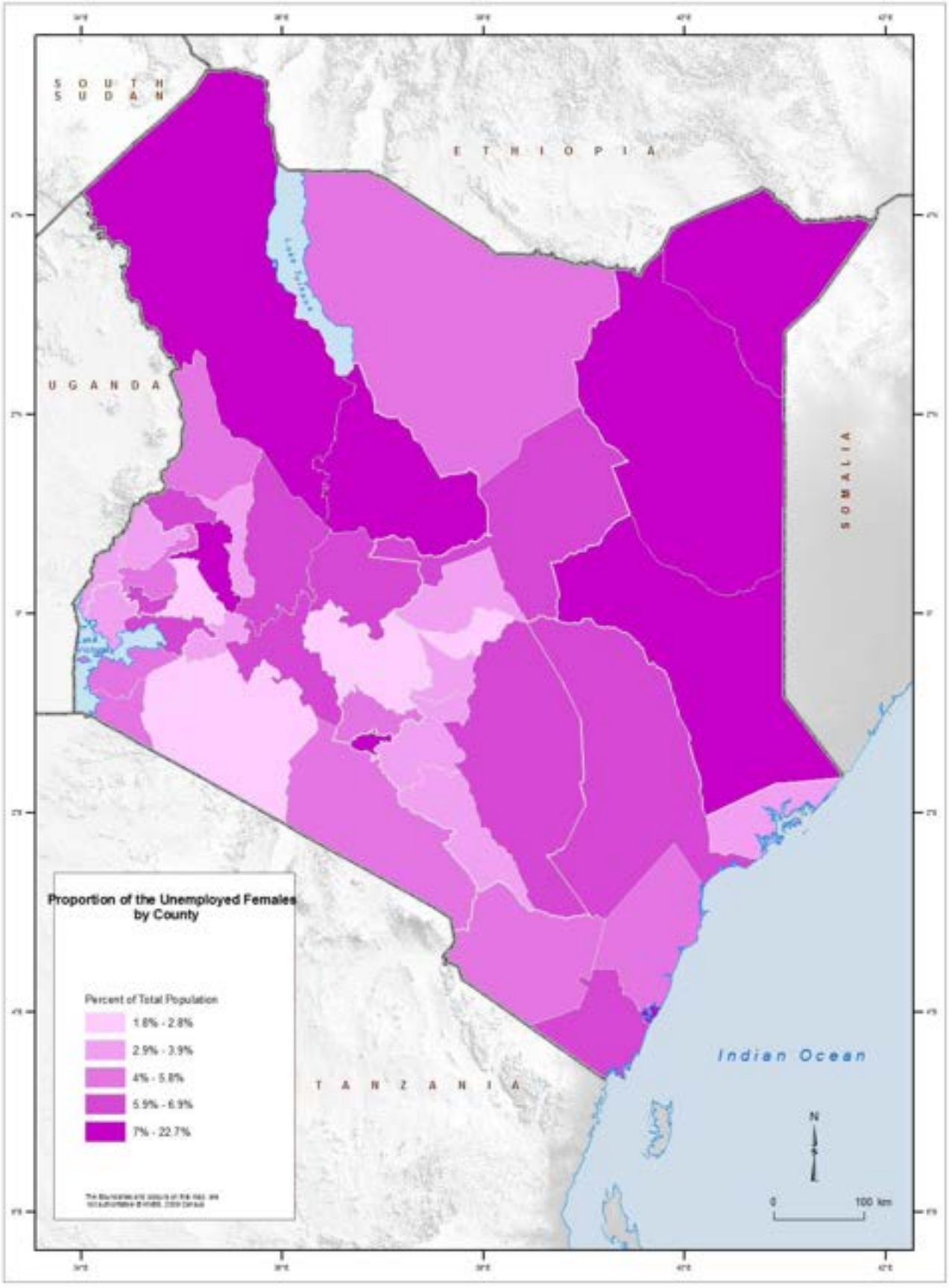
N.4: Proportion of the Population who are unemployed by Sex and County

The arid and semi-arid regions of Kenya are more disadvantaged in terms of unemployment for both female and male. Some counties which are densely populated also face the challenges of unemployment. Whereas unemployment rates in the densely populated counties may be as result of limited opportunities with majority having the necessary qualifications to be absorbed into the jobs, in semi-arid and arid areas it may be due to lack of education and necessary qualifications. Maps N.4.A and B present the proportion of the unemployed female and male by county.

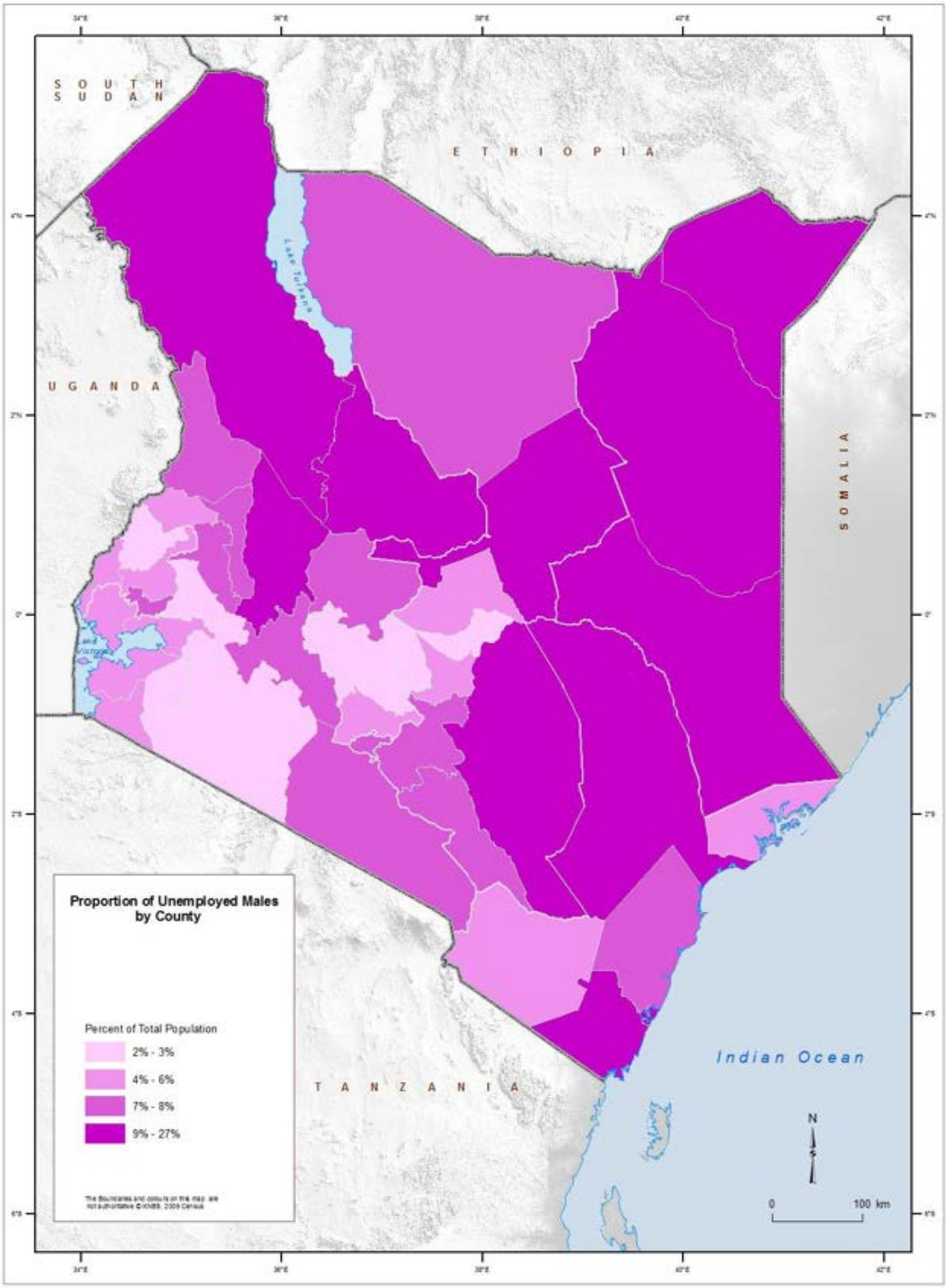
The counties with low proportion of the unemployed female between 1.8 percent and 2.8 percent are Narok, Bomet, Kisii, Nyamira, Nandi, Tharaka, Kirinyaga, Nyeri, Muranga and Nyandarua. In these counties, women are mainly engaged in agricultural employment and small scale business. Similar counties have low male unemployment in the range of 2.0 percent and 3.0 percent. Trans Nzoia is among the counties with low proportion of unemployed male.

Counties with highest proportion of unemployed females are in the range of 7.0 percent and 22.7 percent are Turkana, Mandera, Wajir, Garissa, Kitui, Tana River, Kwale, Nairobi, Nakuru, Kisumu, Mombasa, Uasin Gishu and Samburu. With regards to males, Vihiga, Kwale, Kitui, Tana River, Isiolo, Mandera, Garissa, Wajir, Turkana, Samburu and Baringo counties have high proportion of unemployed in the range of 9.0 percent and 27.0 percent. More males reported to be unemployed compared to females because females tend to take up casual jobs more frequently than males. Counties with significant gender disparities are Vihiga, Isiolo, Baringo and Trans Nzoia as well as counties with major towns of Nairobi, Mombasa, Kisumu, Uasin Gishu and Nakuru.

N.4: A.Proportion of the Unemployed Females



N.5: B.Proportion of the Unemployed Males



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Appendices

Appendix 1: 2009 Kenya Population and Housing Census Cartographic Mapping Personnel

NATIONAL COORDINATOR
Mr. A.K.**M.**Kilele

PROJECT COORDINATOR
Dr. Collins Opiyo

TECHNICAL COORDINATOR
Emma A.Odhiambo

COORDINATORS
Christopher **N.**Omolo
Macdonald **G.**Obudho
Robert Buluma
Micheal Musyoka
Shem O. Onsare
Andrew A.Imbwaga
John **K.**Bore
Henry Osoro

TEAM LEADERS
Benjamin **M.**Ndilinge
David A Kabiduka
David Ngesa
E.Sande Malova
Francoh Mwendwa
Joseph Nyangáya Ndubi
Livingstone **N.**Wekhoba
Nelson Lumumba
Richard A Oreno
William O. Ogundha
Wycliffe T. Alubokho

ASSTASSISTANT TEAM LEADERS
William O. Ruoti
Eustace **N.**Mwaura
George **B.**Irungu
George **M.**Kamula
Harold Sebughe
Hellen **M.**Kariuki
John A.Otieno
Joseph O. V. Onchuru
Peter **M.**Muthama
Solomon Mativo
Thomas O. Omburah
William **N.**Mbusya

MAPPING ASSISTANTS

Abslom Omondi
Alex O. Warinda
Alice Omondi
Alice Wanjohi
Alloys **M.**Otenyo
Ambrose Obudho
Anselim **N.**Okwoyo
Anthony O. Owaga
Antony Njeru
Apollo O. Sigar
Aston A.Omolo
Benard Elegerizu
Benjamin Nyatindo
Benson Mwangi
Bernard Ndabo Kavisi
Caleb Muhangani
Charles **K.**Malisa
Christopher Kimalya
Daniel Kilele
Daniel Mutegi Alphaxard
Daniel O. Okoo
Daniel Wagura
David **K.**Kamau
David Kosinda Oyugi
David **N.**Mungai
Dickson Mwasighandi
Donard Munyithya
Dorcas Angolo
Edison Nganga
Francis Gathui
Francis Kaguru Waithaka
Francis Kimani
Francis Mwandembo
Fredrick W. Odwako
George Isianganditi
George O. **N.**Akuku
Gloria Mweni
Goerge Ogendi
Gonzalus **K.**Munge
Geoffrey Ngaruiya Waiganjo
Grace O. Onyango
Idd Kassim Katera
Isaac Magena
Isaiah Leting' Kipkurgat
Jael A.W. Odar
Jairus Njukia Kuria
James **K.**Gichuhi
James Kapterem
James O. Mkuzi
Joakim Mereu
Joaquim O. Menya
Joash O. Ondieki
Joel Meitame Naisuako
Joel S. Ogari
John Martin Malasre
John Mwangi Mburu
Johnathan Koech
Johnston Oola
Johston Ngonyo
Joseph **K.**Langát
Joseph Kibii Mutai
Joseph Miano
Joseph Nzungu
Josephat Bachia Gitonga
Judy Mbugwa
Julias Karimi Muga
Justus **M.**Ngituju Mucheke
Justus Ndambuki
Kennedy Makhotsa
Lawrence Chea
Lincoln Munyi
Lukanga Wafula
Maina Kangara
Manfred Ratemo
Manyara Dieto
Margret Nyamuok
Martin Opata
Martin S. Ngángá
Martin W. Mayende
Mary Machinji
Mathew Muriuki Thiaka
Maurice Otieno
Mbwana Mattussi
Milka Mwangangi
Monica W Kariuki
Mourice Peter Sila
Nyakundi Karimi
Patrick Cheserek
Paul Barsite Chemjor
Paul Tanui
Pauline **N.**Mutinda
Peter Laposo Kamau
Peter Macharia M
Peter Mumbo
Peter O. Opoloi
Peter Ochieng
Rahab Watetu Murimi
Reuben Birgen
Reuben Musyoki
Reuben Rugut
Rhoda Nyakundi
Richard T. Murimi
Robert **N.**Muthembwa
Robert Z. Omwaka
Roseline A.Oloo
Staslaus Nzuki
Thomas Kagiri
Thomas S. Orenge
Tom O. Oburu
Vinicent J, Obonyo
Vinicent Longlol
William O. Ruoti
Zacharia Mbuthia Mwangi
Zipporah Hiuko Gachemi

Contributors to the 2009 Kenya Population and Housing Census Monographs

Name and Institution	Role
A.**K.M.**Kilele Director General Kenya National Bureau of Statistics	Overall Coordinator
Mr. Macdonald **G.**Obudho Ag. Director, Population and Social Statistics, Kenya National Bureau of Statistics	Administrative Coordinator
Mr. Michael **M.**Musyoka Kenya National Bureau of Statistics	Activity Coordinator & Fertility Author/ Editor
Mr. Robert **C.B.**Buluma Kenya National Bureau of Statistics	Disability author/ editor
Mr. Andrew A.Imbwaga Kenya National Bureau of Statistics	Mortality/Population Dynamics author/ editor
Mr. Robert Nderitu Kenya National Bureau of Statistics	Labour Dynamics author / editor
Mr. Godfrey O. Otieno Kenya National Bureau of Statistics	Education/ Editor
Mr. Charles Obiero Kenya National Bureau of Statistics	Education author
Ms. Rosemary Uside Kongani Kenya National Bureau of Statistics	Gender Dimensions author
Ms. Vivian **M.**Nyarunda Kenya National Bureau of Statistics	Migration /Urbanization author
Mrs. Emma A.Odhiambo Kenya National Bureau of Statistics	Kenya Population Atlas author
Mr. Mutua Kakinyi Kenya National Bureau of Statistics	Data Processing
Mr. Peter Nyongesa Ministry of State for Planning, National Development and Vision 2030	Data Processing
Mr. Paul Waweru Kenya National Bureau of Statistics	Data Processing/ Formatting
Mr. Bernard **D.**Obasi Kenya National Bureau of Statistics	Data Processing
Dr. Alfred Agwanda University of Nairobi	Lead Consultant - Demographic Monographs/ author: Population Dynamics & Household and Family Dynamics
Mr. John Thinguri Mukui Nairobi	Lead Consultant – Socioeconomic Monographs
Prof. Elias H. O. Ayiemba University of Nairobi	Consultant/ Fertility and Nuptiality author
Dr. Anne Khasakhala University of Nairobi (Consultant)	Consultant/ Mortality author
Mr. George Odipo University of Nairobi (Consultant)	Consultant/ Migration author
Mr. Ben O. Jarabi University of Nairobi	Population. Projections author
Dr. Samuel Owuor University of Nairobi	Consultant/ Urbanization author
Mr. Olum Gondi Nairobi	Consultant/ Labour Dynamics author
Dr. Owiti A.K'Akumu Nairobi	Consultant/ Housing Conditions, Amenities and Household Assets author

Name and Institution	Role
Dr. Abagi Okwach Nairobi	Consultant/ Education author
Mr. Michael **K.**Letwatt Nairobi	Consultant/ Data Processing
Mr. Raphael O. Owako Ministry of Public Health and Sanitation	Disability author
Mr. Thomas Ogutu Ministry of Housing	Housing Conditions, Amenities and Household Assets author
Ms. Leah Kiura Private Consultant, Nairobi	Gender Dimensions author
Mr. George Kichamu National Council for Population and Development	Disability author
Mr. Samuel Ogola National Council for Population and Development	Urbanization author
Mr. Peter Nyakwara National Council for Population and Development	Labour Dynamics author
Mr. Peter Ochieng' Kenya National Bureau of Statistics	Systems Maintenance
Mr. Rogers Mumo Munywoki Kenya National Bureau of Statistics	Formatting
Mr. Silas Mulwa Kenya National Bureau of Statistics	Formatting
Mrs. Milka Mwangangi Kenya National Bureau of Statistics	Formatting
Mr. George **M.**Kamula Kenya National Bureau of Statistics	Kenya Population Atlas author
Mrs. Hellen **M.**Wanyoike Kenya National Bureau of Statistics	Kenya Population Atlas author
Mr. Shem Onsare Kenya National Bureau of Statistics	Kenya Population Atlas author
Ms. Annette Adhiambo Aduda University of Nairobi	Intern/ Fertility and Nuptiality
Ms. Zena Lyaga University of Nairobi	Intern/ Education and Mortality
Ms. Susan Njoki Maina	Intern/ Population Projections
Ms. Margaret **M.**Mwaila	Intern/ Labour Dynamics
Ms. Truphosa Otwala	Intern/ Disability and Gender
Ms. Katunge Kiilu Kenya National Bureau of Statistics	Editor
Mr. Maina Monyoncho Kenya National Bureau of Statistics	Reviewer/ Editor
Dr. Lawrence Ikamari University of Nairobi	Reviewer
Prof. John Oucho University of Nairobi	Reviewer
Dr. Kimani Murungaru University of Nairobi	Reviewer
Dr. Yohannes A Kinfu African Population and Health Research Center	Reviewer
Oliver P. Fischer United States Census Bureau	Demographer/ Data Edit/ Validation

Name and Institution	Role
Martin Gregory United States Census Bureau	Specialist, Data Processing
Peter Way US Census Bureau	Demography/ Projections
Thomas McDevitt US Census Bureau	Demography/ Trainer
Lisa Lollock US Census Bureau	Demography/ Trainer
Elisa Rustenbach US Census Bureau	Demography/ Trainer
Saskia R. DeVries US Census Bureau	Demography/ Trainer
Derek Azar US Census Bureau	Demography/ Trainer